

IN THE
United States
Circuit Court of Appeals,
FOR THE NINTH CIRCUIT.

J. M. Owen,

Appellant,

vs.

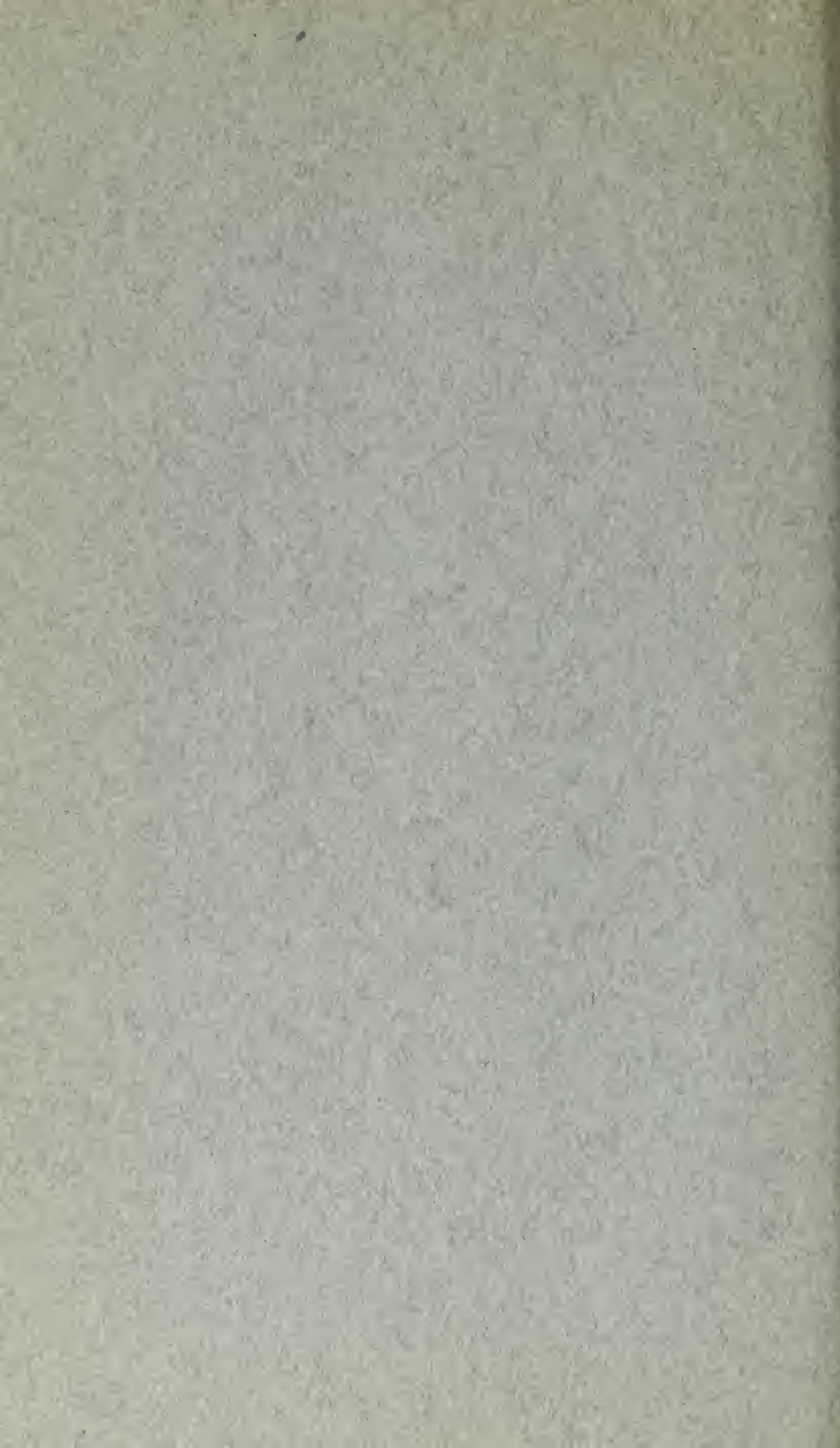
Perkins Oil Well Cementing Com-
pany, a corporation,

Appellee.

APPELLANT'S OPENING BRIEF.

WESTALL AND WALLACE,
Board of Trade Bldg., 111 W. 7th, Los Angeles,
Attorneys for Defendant-Appellant.

FILED
SEP 13 1929



TOPICAL INDEX.

	PAGE
Statement of the Case.....	3
The Patent in Suit [R. 254] Explained.....	4
The Defense of Non-Infringement Outlined.....	11
Referring Briefly to the Defense of Anticipation.....	13
The Defense of Want of Utility Briefly Outlined.....	14
Errors Assigned, Considered by Reference to the Court's Opinion	14
Argument	20
The Effect of Prior Decisions in Other Cases or Upon Interlocutory Motions in the Case at Bar.....	20
The Principal Thing of Value, and the Only Thing That Is Really Contended for in This Suit, Was Dedicated to the Public at the Time of the Grant of the Patent in Suit, and Defendants in Their Use of It, Are, Therefore, Only Exercising a Public Right	26
The Shreveport Depositions Established Not One but a Number of Defenses, Any One of Which Authorizes the Dismissal of This Suit. In Such Depositions It Is Proven That the Identical Sub- ject-Matter as Described and Claimed in the Perkins and Double Patent in Suit Was Known and Used Around Shreveport Before the Alleged Invention of the Patentees in Suit.....	36
The Use of Bundles of Cement Sacks and Sacks Filled With Shale as Indicators.....	41
One of the Early Specific Instances of the Use of Sacks as Indicator, Pardue Well No. 1.....	49
The Prior Use of Sacks as Indicator at Childs No. 1	50

	PAGE
Prior Use of Sacks of Shale as Indicator at Richardson Well	51
Generally as to the Use of Wooden Plugs as Indicators or Barriers in Cementing.....	53
Specific Prior Uses of the Use of Plugs as Indicators and Barriers. Christian Well No. 1.....	59
Prior Use of Wooden Plug at the Dixie Well.....	70
The Prior Use of Wooden Plug at Jolly Well No. 2..	72
The Prior Use of Wooden Plug at Powell No. 1 Well	73
The Prior Use at Blackmon No. 1 Well.....	78
A Brief Consideration of the Weight of the Evidence Above Referred to.....	81
Defendants Have Not Infringed the Claim in Suit....	182
We have Heretofore Repeatedly Stated That the Only Possible Novelty of the Claim, as Agreed Upon by Perkins and Double and the Patent Office in the Prosecution of the Application for the Patent in Suit (and They Knew Nothing of Prior Uses at Shreveport at That Time) Consisted in Separating the Water From the Cement by Barriers. The Process of Cementing Without Any Barrier Whatever, Which the Record Shows Has Long Been in Highly Successful Use, and Is Used in Competition With the Barrier Method Even at the Present Day, Was Distinctly Adjudicated by the Patent Office to Be Old.....	95
When Defendants Use a Method in Which an Indicator Is Embedded in Cement, Obviously, They Are Using Such Admittedly Old No-Barrier Method	95

	PAGE
These Facts Cannot Be Converted, for They Appear in the Very Application Proceedings Upon Which the Patent in Suit Was Based.....	95
The Claim Calls for Water as Pressure Fluid. Defendants Have Never Used Water: They Have Always Used Mud. Mud Is Not the Equivalent of Water	100
Defendants in Their Modified Inskip Process Have Omitted the Entire Last Step of the Claims in Suit	101
Overlooking the Antiquity of the Entire Subject-Matter of Specification and Claims as Established by the Shreveport Depositions, and Treating the Record as Though no Such Evidence Was Before the Court, the Essence of the Alleged Invention as Agreed Upon by Applicants and the Patent Office Namely, Separation of Water From the Cement, Is Practically of no Value.....	107
Defendants'-Appellants' Appeal From the Action of the Court in Entering the Decree in Contempt [R. 139] and the Judgment Thereon Against It [R. 146] in the Sum of \$3,155.05 Expenses, and \$436.20 Costs. It Is Believed There Is Clear Error Involved in These Decrees.....	110
The Amount of Judgment in the Final Decree (\$16,250.00) Even Assuming Validity and Infringement Is Very Excessive, This Amount Is Based Upon a Finding That \$50.00 Per Well Is a Reasonable Royalty. The Only Royalty Ever Paid for the Use of the Process of the Patent in Suit Was \$25.00 Per Well and the Following Admitted Facts, We Believe, Will Show Even the Last Mentioned Amount to Be Excessive.....	114
Conclusion	117

TABLE OF CASES AND AUTHORITIES CITED.

	PAGE
Adam v. Folger, 120 Fed. Rep. 260, 263, 55 C. C. A. 540	106
Burns v. Meyer, 100 U. S. 672.....	29, 84
Continental Paper Bag Co. v. Eastern Paper Bag Co., 210 U. S. 405.....	29, 85
Geoghegan v. Ernst, 256 Fed. 670.....	83
Grant v. Walter, 148 U. S. 554.....	29
Hopkins on Patents, page 188.....	97
Hopkins on Patents on page 189.....	98
Hopkins on Patents, page 197.....	106
Hopkins on Patents, page 340.....	105
Hopkins on Patents, page 341.....	105
Hopkins on Patents, page 348.....	105
Hopkins on Patents, page 352.....	30
Hopkins on Patents at page 421.....	39
Hopkins on Patents, Section 289.....	101
Hopkins on Patents, Sec. 289, Rule XXI.....	112
Howe Machine Co. v. National Needle Co., 134 U. S. 394	29
McClain v. Ortmeier, 141 U. S. 419, 35 L. Ed. 800....	106
National Casket Co. v. Stoltz, 157 Fed. 392.....	39
National Hollow Brakebeam Company v. Interchange- able Brakebeam Co., 106 Fed. Rep. 693-714.....	97
Selectasine Patents Co. v. Prest-O-Graph Co., 282 Fed. 223	99
Title 35, Section 31, U. S. C. (formerly Section 4886, R. S. U. S.).....	36
Tostevin-Cottie Manufacturing Co. v. M. Etinger Co., Inc., 254 Fed. 434.....	83, 90
United States Peg Wood Co. v. Sturtevant Company, 122 Fed. 472.....	29

	PAGE
Walker on Patents, (5th Ed.), Section 71.....	37
Walker on Patents, 5th Ed., Section 122.....	34
Walker on Patents (5th Ed.), Section 176, page 220	27, 29
Walker on Patents 5th Ed., page 221, Section 176.....	34
Walker on Patents, 5th Ed., Section 177, page 226.....	28
Walker on Patents (5th Ed.), Section 181.....	28
Walker on Patents (5th Ed.), Section 182.....	104
Walker on Patents (5th Ed.), Section 354.....	83
Walker on Patents (5th Ed.), Section 354, page 441..	90
Walker on Patents (5th Ed.), Sec. 660.....	20
Westinghouse v. Boyden Power Brake Co., 170 U. S. 537, 568, 42 Law Ed. 1136.....	104
White v. Dunbar, 119 U. S. 51.....	28, 84



No. 5927.

IN THE

United States

Circuit Court of Appeals,

FOR THE NINTH CIRCUIT.

J. M. Owen,

Appellant,

vs.

Perkins Oil Well Cementing Com-
pany, a corporation,

Appellee.

APPELLANT'S OPENING BRIEF.

STATEMENT OF THE CASE.

Two appeals (combined by stipulation of the parties) are before the court: (1) From an interlocutory decree [R. 344] entered January 23, 1928, finding claim 2 of Letters Patent 1,011,484, granted December 12, 1911 to Perkins and Double [a copy of which patent is found at R. 254] valid and infringed and directing an accounting; and, (2) from the final decree [R. 1381] awarding judgment to plaintiff on such accounting in the sum of \$16,-250.00, together with costs. There is also involved in the appeal from the final decree what amounts to an appeal

from a decree in contempt [R. 139] and the proceedings thereupon, resulting in a decree supplemental thereto [R. 146] awarding judgment in favor of plaintiff and against defendant in the sum of \$3,591.25 and costs.

These appeals present questions of validity and infringement of claim 2 of the patent referred to; the propriety of the court's order of punishment for contempt, and the correctness of the judgment of the court on accounting.

While the voluminous three-volume record suggests complexity, it will be found that the case is more than ordinarily simple, as the subject-matter of the only claim in suit is quite brief and can readily be understood even without reference to the specification and drawings of which it is a part; furthermore there is no complicated prior art; also, we believe that much of the record will be found to contain matters of very slight if any pertinence to the material issues here presented, and that which is pertinent is largely cumulative on simple and easily understood issues.

The principles of law to be invoked are quite elementary.

The Patent in Suit [R. 254] Explained.

With the following brief explanation the court will readily understand the only claim in suit: As an oil well is drilled a pipe lining of the hole is sunk, this pipe ultimately, as a conduit for the oil, leading from the oil sands to the surface of the ground. In drilling the well, water courses are usually encountered, and unless this water is shut off the well will be a water well instead of an oil well.

The patent relates to methods for shutting off such water by pumping cement (of the kind used to make sidewalks, but mixed with a sufficient volume of water to make it fluid) down inside of the casing and up outside of the casing so as to fill the annular space between the well casing and the wall of the hole.

The claim reads as follows [R. 260]:

“The method of cementing oil wells which consists of forcing cement down through the regular well casing by means of water pressure, the water being separated from the cement by a suitable barrier, forcing the cement up outside the casing, and holding the cement in position under the water pressure until the cement hardens.”

Now, in order that the court may have a preliminary understanding of the scope of the claim just quoted and its relation to the process as a whole (part of which is not claimed) let us, laying aside the claim for a moment consider the process illustrated and described in the specification and drawings of the patent in suit. The hole has been drilled, say, a half way down to the oil sands when water is encountered. The well casing hangs in the well extending from the top almost to the bottom. The well is filled both inside and outside of the casing with water or mud. There may be a caving of the wall of the hole outside the casing at any place along its length. The problem is to remove any debris caused by such caving, and to get fluid cement into the annular space outside of the casing. The first step (not strictly of the cementing process, and not mentioned in the claim in suit) consists of what is known as “securing circulation,” by pumping

water or mud down inside the casing and up outside the casing until it flows out on the ground at the top of the well. The object of this preliminary step is to clear away all debris that may be outside of the pipe and may interfere with the proper placing of the cement. After circulation is thus secured, that is to say, after it becomes apparent by the free flow of the circulation water down through the casing and out on the ground outside of the casing at the top of the well that the way is clear for the cement—a barrier (illustrated as a plug in the patent in suit) is placed in the casing; then upon top of this barrier or separator a sufficient amount of fluid cement to cement the well—usually enough to fill the pipe for at least several hundreds of feet—is forced by pump pressure into the well on top of the barrier or separator. Then another barrier is placed upon top of the fluid cement and more water is pumped on top of this upper separator to force the two barriers with the cement between them down through the casing. The casing is not resting on the bottom of the hole, but is raised so as to permit the cement to pass around the bottom to the outside of the casing, and when the lower barrier or separator reaches the bottom it is below the casing and there is sufficient space above it to permit the cement to pass around the bottom of the casing to the space outside of it. Referring particularly to the drawings in suit [R. 254] the court will see that below the upper barrier is shown a spacing post (indicated in the drawings as 14). When the bottom of this spacer strikes the bottom of the well or strikes the lower barrier (which is resting on bottom) the upper barrier is stopped inside of the casing and this

stopping of the barrier slows or stalls the pump which indicates to the operator that the upper separator has reached bottom and that consequently the cement, except that immediately below the upper barrier is outside the casing. The pump is then shut down and the top of the well sealed by a tight head so that the solid column of water or mud on the inside of the well will prevent the cement from returning back through the open bottom of the casing. The well is then allowed to stand for several days until the cement hardens, when the tight head is removed and drilling tools again inserted into the casing and the barriers in the bottom of the casing together with what cement remains surrounding them are drilled out and the well is further sunk until another water course is reached when the process of cementing is again repeated.

In the examination of the specification and drawings of the patent in suit, we request the court at this point to carefully note the emphasis that is placed in the specification (as well as in all of the claims, including the one in suit) upon placing the cement in position *without permitting it to come in contact with the water*. (As we shall later see this is also greatly emphasized in the application proceedings upon which the patent in suit was based.) For instance, in the specification of the patent in suit [R. 256, line 1, *et seq.*] it is said:

“A further important object is to convey the cement into place without allowing the cement to come in contact with or be diluted by the water which is used for forcing the cement in.”

Again near the bottom of R. 257 in the specification in suit the patentee states:

“During this downward progress of the cement the packer [barrier] 8 prevents the cement which is above the packer [barrier] from mixing with the water which is below the packer [barrier] and which is being forced out by the packer [barrier], and thus the cement is introduced into place without being diluted by the water.”

Again near the top of R. 259 the patentee in his specification says:

“During the downward progress of the upper packer [barrier] 13, the water is prevented by the packer [barrier] from coming in contact with the cement and after the top packer [barrier] has arrived at the bottom the upper cup leather continues to prevent the water from escaping from the casing and mingling with the cement.”

Still again about one-third down R. 259 it is said by the patentee:

“The packers [barriers] are left in this position to allow the cement to harden which process quickly takes place, none of the water from within the casing being permitted to dilude it or retard its setting.”

Near the bottom of R. 259, the patentee also says:

“The water which is in the well is forced up out of the space outside of the casing as the cement is introduced, and while a small portion of the cement which is first introduced comes in contact with this water and does become softened thereby to a certain extent, this cement lies at a considerable point above the zone which is to be covered by the cement.”

Notice further that *all of the claims*—not only claim 2 in suit—*emphasize the separation of the water from the cement by a suitable barrier.*

From the above quotations from the specification (as well as those of a similar nature contained in the application proceedings upon which the patent in suit is based—to be later considered) it is quite clear that the patentee on one side and the government on the other supposed that the separation of the water from the cement was an important feature, *and the patent is clearly and plainly granted to cover such supposed invention.*

As a complete understanding of the method and process of the patent in suit will greatly simplify the work of this tribunal in passing upon the issues of anticipation and infringement, we also desire to emphasize at this point the fact that while the patent drawings show a spacing post 14, which is illustrated as extending below the top barrier, *so unimportant was this feature thought, or so clearly were patentees convinced that it was NOT THEIR INVENTION*, but was in the prior art, that its function is left to the prior knowledge of those skilled in the art and the only reference in the specification to this feature is at the bottom of R. 258 where the patentees say:

“When the post 14 strikes the bottom packer [barrier] 8 which already rests at the bottom of the well, further downward movement of the packer [barrier] 13 is positively stopped and the packer [barrier] 13 is arrested while its upper portion at least is within the casing.”

As we have seen this indicates by the stalling of the pump that the cement is in proper place outside the cas-

ing, but *this indicating function is not mentioned in the patent, and the apparatus, namely the spacer 14 and the method of manipulating and using it in connection with the casing* ARE NOT CLAIMED. No invention whatever is predicated nor suggested in the patent in suit in the employment of such indicating means; and it is consequently one of our earnest contentions that such means, being clearly disclosed and illustrated and *not claimed* are dedicated to the public for failure to claim. (Assuming for the moment novelty.)

The claim calls—not for an *indicator* to indicate when the cement is in proper position outside the casing, but for a BARRIER to separate the water from the cement, and plainly a barrier might be a cement sack or a comparatively thin disk, neither of which could have any indicating function whatsoever.

It will be noted that the two claims not sued on (claims 1 and 3), are more limited than the claim in suit. For instance, claim 1 includes the step of securing circulation above described, and both claims 1 and 3 call distinctly for *two* barriers, one below and one above the cement.

Note also that claim 2, if taken literally according to its terms calls only for a top barrier, but being for part of a process in which the feature of separating the water from the cement is repeatedly mentioned as most important and vital it is our contention that this claim is only fragmentary and a description of part of a complete process in which two barriers are necessarily used.

The Defense of Non-Infringement Outlined.

Most briefly, defendants contend they have not infringed the claim in suit because,—

(1) They have never used any barrier or barriers to separate any pressure fluid from any cement, and have thus omitted from their process that feature mentioned and repeatedly emphasized in the specification of the patent in suit as most important (as above shown) and they have not substituted any possible equivalent for such important feature.

(2) They have used a single plug (imbedded, however, in the cement *and not, therefore, a barrier*), and we contend that the claim is only for part of a process in which plainly two barriers must be used to prevent dilution of the cement by the water.

(3) They have never used *water* as a pressure fluid *as called for by the claim in suit*. They used a thick heavy mud, which will be shown not to be the equivalent of the water called for by the claim.

(4) They have never held the cement in position under water or other fluid pressure during any hardening of the cement, and have thus dispensed with the last step of the claim in suit—omitting a complete step of the claimed process.

(5) There are 54 words of the claim. More than half of this language does not in letter or in spirit or at all describe defendants' process.

(6) The part of the claim which does describe defendants' process equally describes processes admitted in the very application proceedings upon which the patent

was based to be old, and not the invention of the patentees in suit.

(7) Defendants have used only the part of the subject-matter described in the specification of the patent in suit which is admitted in the application proceedings upon which the patent was based to be old in combination with certain of those parts which by reason of a failure to claim we contend to have been dedicated to the public.

To further explain the above failure of the claim in suit to cover defendants' process:

In answer to the bill of complaint in this case defendants admitted that they had used the process described and claimed in letters patent No. 1,443,474, granted Jan. 30, 1923 to M. E. Inskeep. [R. 22.] This patent shows a plug which is equipped with spring-actuated dogs which permit it to go downward through the casing but prevent it from arising in the casing, these dogs acting in a manner similar to the pawls of a ratchet to slide over the wall of the casing in the descent of the plug but which expand outwardly and bite into the casing when the plug starts to move upwardly. *This plug is not used to separate any cement from any pressure fluid:* it is embedded in the cement, that is to say, it has cement above it and cement below it. It is used for two purposes, neither of which nor the apparatus nor method by which they are accomplished are mentioned in the claim in suit: First, the Inskeep packer plug acts as an indicator to indicate when the cement which is below it is in proper position; Second, it holds the cement in position outside of the casing (by means of the spring actuated dogs above referred to) during

hardening process, thus permitting the tight head to be removed and various steps necessary for further work on the well to be accomplished without waiting for the cement to harden. Cement is placed upon top of this plug because of a demand on the part of many operators, some of whom require as much as fifty or one hundred feet of cement above the plug. This is done as a safety factor, as frequently in pumping the cement will pass the plug and may be pumped too high outside the casing. This cement which is left in the casing is afterwards drilled out in the further sinking of the well and is not considered in any respect detrimental; but, on the contrary, is a safety factor to assure that the cement is not pumped too high outside the casing.

At the time of the grant of the Perkins patent in suit it was supposed that WATER could satisfactorily and safely be used as a pressure fluid, and this may be true with the standard method of drilling, but with the method at present used most largely (the rotary method), experience has shown that the circulation fluid must be a thick heavy mud.

Referring Briefly to the Defense of Anticipation.

The only claim in suit—but this happens to be also true of all the claims of the Perkins patent—has been clearly anticipated *not once but many times* by the testimony of many positive, credible and unimpeached witnesses. *There is no conflict in this testimony whatsoever. If such testimony is not sufficient to anticipate a patent, no patent could ever be anticipated by any testimony.*

The Defense of Want of Utility Briefly Outlined.

The patent in suit was plainly granted upon a fallacy—that of supposing that there was some utility in separating the pressure fluid from the cement. The evidence shows that there is no advantage whatsoever in any such separation. During the entire life of the patent in suit a very large number of wells have been cemented and are constantly being cemented without plugs or indicators or barriers of any kind whatsoever. Such cementing has been as successful as those in which one or more plugs or barriers were used. There is no advantage whatsoever in separating the cement from the pressure fluid. There *is* an advantage in the use of a plug as an indicator to indicate when the cement is outside of the casing, but such indicator and the apparatus necessary for its use and its method of use IS NOT CLAIMED in the patent in suit and is therefore dedicated to the public.

Errors Assigned, Considered by Reference to the Court's Opinion.

The opinion of a court in support of its decision is always of vital interest to every litigant and his attorney. It may disclose a thorough grasp of the facts and a correct interpretation and application of the law, or, on the contrary, it may quickly expose fallacies of law and fact which instantly destroy every presumption in favor of the correctness of the decision it is designed to support.

We earnestly recommend consideration of the trial court's opinion [R. 337] in the case at bar, as we believe it will be a great assistance to Your Honors in quickly understanding the specific reasons for this appeal.

Our reasons for contending that the trial court's opinion affords no logical support for the decision appealed from may be summarized as follows:

(1) It ignores arguments on admitted facts and elementary law relating to the simplest and most prominent of issues, which we deem conclusive and unanswerable, and which we most earnestly and repeatedly challenged court and counsel to consider and attempt to answer.

(2) Instead of squarely meeting the issues *in the case at bar* and directly applying the law to the facts established *in this record*, it relies heavily upon decisions in other proceedings not before the court for review, notwithstanding that some of such decisions were obviously based upon collusion, others were by consent, and others were in proceedings not adequately defended, the court erroneously stating or assuming substantial identity of issues, when such was not the fact.

(3) It repeatedly states and assumes that there is a conflict in the evidence which we contend most conclusively establishes not one but a number of prior uses, when there was no conflict in such evidence nor any reason to throw a doubt upon its truth.

(4) It fails to mention or in any manner pass upon vital issues.

To be more specific, we earnestly contend that the trial court's opinion should have contained a paragraph to the following effect:

“It is true that the separation of the water from the cement by barriers is a feature of the patent in suit most emphasized in the specification itself as

well as in the application proceedings upon which it was based; and it is also true that such fact is further emphasized as constituting the essence of the invention of the patent in suit by being included not only in the claim sued on, but in each of the other claims. It is also true that defendants do not use any barrier or barriers whatsoever nor any equivalent therefor, and while the court recognizes the elementary law that 'the claim measures the invention' (Walker on Patents (5th Ed.), Sec. 176), and that the question of infringement is whether or not the claim correctly describes defendants' process (Tosteven-Cottee Mfg. Co. v. Etinger Co., 254 Fed. 434) and that the court must take the claim as it finds it (White v. Dunbar, 119 U. S. 51) and that the court cannot rewrite the claim to make it include something more or different from what its words express (Burns v. Meyer, 100 U. S. 672), the court finds this law is not applicable in the present case for the following reasons * * *."

The evidence was so clear and our argument so earnest and our challenge to court and counsel for an answer was so insistent that we believe the court's opinion should have contained a paragraph in substance as follows:

"Although it is impossible to escape the conclusion on this record that the separation of the pressure fluid from the cement was of the very essence of the supposed invention of the patent in suit, and although it is most clearly established that such separation is of no utility whatsoever, and notwithstanding that it is now apparent that the *real* value of the subject-matter disclosed (not claimed) in the patent in suit is not in the separation of pressure fluid from cement by barriers but resides in the spacer which is illustrated as 14 in the patent draw-

ings and which serves as an indicator to indicate by slowing or stalling the pump when the cement is in proper position outside the casing, and although this spacer is illustrated and described in specification and drawings, but *not claimed* in the only claim sued on, and notwithstanding that the law is clearly to the effect that that which is illustrated and described but not claimed is thereby dedicated to the public, I consider such law not applicable in the present instance because * * *.”

Defendants went to great expense to produce what we believe to be unassailable evidence of a number of prior uses. This evidence was to the effect that identically the subject-matter claimed had been used around Shreveport, Louisiana some months prior to the date of the alleged invention of the patentees in suit. *There was no conflict whatever* in this testimony. *It would be hard to imagine a clearer and more conclusive showing of prior use. We urge that if this evidence does not establish the invalidity of the patent in suit no patent could ever be found invalid on the ground of prior use.* Under the circumstances we believe that we should have been entitled to a paragraph in the trial court's opinion somewhat as follows:

“Fifteen witnesses have been produced by defendants to prove a number of prior uses. Many of them are representative citizens of Shreveport, Louisiana, all corroborating each other as to prior uses of the subject-matter of the only claim in suit. These witnesses are highly credible. They are unimpeached, and they are supported by the logs of wells and other documentary evidence including contracts for drilling of wells proving conclusively the dates of the

operations in question. There is no reason, except that hereinafter explained for not believing their testimony. These uses are said to have occurred a comparatively short time before the alleged invention of the patent in suit, and, as it takes but a moment to insert a plug in a casing and as the operations are otherwise concealed from the eye, it would be quite easy for one to be in the immediate vicinity without knowing that a plug had been used, yet because plaintiff has produced an equal number of witnesses, many of whom were at the time of testifying out of employment, who, while admittedly not present at the times of any of the alleged uses, testified that they did not know of them, I am going to consider this a conflict in the testimony and refuse to believe the positive direct corroborated and unimpeached testimony of fifteen witnesses that such uses did actually occur for the following reasons * * *.”

Substantially the following paragraph should also have been found in the trial court's opinion if the issues had been squarely met:

“Defendants contend that they have omitted an entire step of the process of the claim in suit described as ‘holding the cement in position under water pressure until the cement hardens.’ Under well established law recourse must be had to the specification and drawings to determine the meaning of this language.

Such reference informs us that after the cement is outside of the casing the pumps are shut down and the pressure held in the casing by a tight head which closes or seals off the top of the well. It appears that in defendants' process after the cement is in place outside the casing the spring actuated dogs on

the Inskeep packer bite into the casing and prevent the upward movement of the plug thus holding the cement outside the casing, and the tight head can be and is removed, defendants thus not relying upon the pressure or the tight head to hold the cement in the position outside the casing. It is clear there is a great advantage in this as it permits removal of the head and other necessary work preparatory to further drilling to be performed without the delay incident to the use of the tight head, thereby saving several days' time. Thus the dogs in defendants process and the tight head in the patent in suit perform the same function of holding the cement outside of the casing, and the question is presented as to whether they are equivalents. It is elementary that an equivalent is a means or step which not only performs the same function, *but does so in substantially the same manner.* (Walker on Patents (5th Ed.), Sec. 354.) It is true that the dogs do not hold the cement outside the casing in substantially or at all in the same manner as the pressure and the tight head of the patent in suit, but these facts and this law are not to be applied in this case because * * *."

Other paragraphs directly meeting and passing upon most vital issues could readily be suggested for insertion in the trial court's opinion, but the suggestions so far presented will give the court a brief but clear understanding of the issues upon this appeal and will enable a speedy appraisal of the pertinence and value of the law and evidence to be called to Your Honors' attention in the argument to follow.

ARGUMENT.

The Effect of Prior Decisions in Other Cases or Upon Interlocutory Motions in the Case at Bar.

As we have seen, the trial court leans most heavily upon prior decisions; *notwithstanding that the trial of this case did not involve a review of the correctness of such decisions.*

It is quite usual to call the court's attention, by setting up in a sworn answer to be used as an affidavit upon motion for a preliminary injunction, prior adjudications of validity as well as allegations of general public acquiescence, but this is done merely to raise the presumption of validity sufficiently to support the grant of a preliminary injunction. Such circumstances of prior adjudications between other parties and public acquiescence are not pertinent on final hearing of a patent infringement suit. (Walker on Patents (5th Ed.), Sec. 660) at the top of page 746 the author says:

“Such allegations [of acquiescence of prior adjudication] are merely statements of evidence and pertinent only on motion for preliminary injunction and even then only in so far as they indicate probable eventual success on the part of plaintiff. *They are not ultimate facts which form the basis of plaintiff's case.*” (Italics ours.)

In the first suit in which validity of the Perkins patent was sustained, the case of Perkins v. Wigle, substantially the only defense was non-infringement. Defendants were not using the Inskeep packer. Defendants on the verge of bankruptcy (afterwards did file a peti-

tion in bankruptcy as a result of the suit.) While present counsel for defendants represented Wigle we could not secure the necessary cooperation from him to effectively prepare and secure evidence, or present the case; and after decision there was no money for an appeal—although we were quite sure we could have established the erroneous nature of the decision if an appeal could have been taken, even upon that record. A much stronger defense of non-infringement is presented in the case at bar in that the entire last step of the claim in suit is omitted in defendants' process. An inkling can be gained as to the probability of success on appeal of the Wigle case by the following statements by Judge Trippett in the Wigle case opinion:

“I was very strongly impressed with the idea that plaintiff had made out a clear case, but after listening to Mr. Westall's argument my clear case idea was very much shocked, especially that argument in regards to what was disallowed by the Patent Office.”

Neither court nor counsel in these proceedings, nor in any other suit, *have ever answered* this argument which “very much shocked” the court's “clear case idea.”

After this first decision, the other decisions, not on interlocutory motions in the case at bar, sustaining the Perkins patent were either on their face by consent or were under circumstances strongly suggesting collusion. The decree against Halliburton was by consent [at R. 503, about $\frac{1}{4}$ down the page, Halliburton admits that he did not put any defense into this case] notwithstanding that two sets of patent attorneys employed to defend him

suggested that he had nothing to fear from the Perkins patent in suit, and notwithstanding also the fact that he was employing barriers exactly as described in the Perkins specification, using not one but two plugs. [R. 572, bottom of page.] The reason for this lack of defense was because Perkins and Halliburton had arranged for a division of the field and Halliburton was Perkins' exclusive licensee in the mid-continent field. [R. 484, middle of page.] In a letter to present counsel for defendants dated June 28, 1922, introduced in evidence as Defendants Exhibit A [R. 506, quotation R. 507] Halliburton says:

“My counsel, Brown, Boetcher and Diener of Chicago, Illinois, and H. A. Ledbetter of Ardmore, Oklahoma, after a careful examination of the Perkins' patent informed me that I had nothing to fear from Perkins.” (These attorneys specialized in patent law.)

Notwithstanding the advice of two sets of patent attorneys, Halliburton settled with Perkins. Why? Obviously because it appeared to be better business to secure or bolster up an unauthorized monopoly and to combine capital to enforce it against others than to prove and acknowledge what his attorneys evidently advised was the truth and what we contend here, namely, that there was nothing of real value in the Perkins' patent which did not belong to the public by dedication in the very patent instrument and proceedings upon which it is based, and that the claim could not consistently, under the law, be construed to cover an indicator plug not used to separate pressure fluid from cement. Clearly, Halliburton's highly efficient double-barreled arrangement of attorneys were

able to confidently give such advice without reference to the fact since uncontrovertibly established by the Shreveport depositions, namely, that it also became public property by reason of prior use in Louisiana—*not merely of the indicating plug, but the exact arrangement of two plugs and their use as barriers or otherwise as described and illustrated in the Perkins and Double specification and all claims.* Yet opposing counsel in the case at bar would have Your Honors blindly follow the collusive attempt of the Halliburton consent decree to misappropriate property which in the opinion of his own able counsel was of the public domain. And notwithstanding the fact that, as we have heretofore seen, that under the law it should have no weight on final hearing of the case at bar, not being within the issues.

In the next of the litigation so much relied upon by the trial court, namely, *Burras v. West*, we have an imposing looking record [introduced as Plaintiff's Exhibit 8, R. 485, one-third down page]. Much of the bulky camouflage of this *Burras and West* record *deals with another patent not in issue in the present litigation.* The record is padded with hundreds of pages (as the court will see by reference to this exhibit) of unnecessary testimony on behalf of plaintiff, but *with only a scant six or seven pages of testimony on behalf of the defense relating to the patent here in suit.* Moreover, such evidence related to prior uses which were properly not considered by the court because not pleaded as required by former section 4920, R. S. U. S. (U. S. Code Title, 35, Sec. 69). This is why we urge that the conclusion is irresistible that such decision was collusive. Certainly the suit was inade-

quately defended, there being practically no defense to the patent here in suit.

Suit was afterwards instituted on the said Perkins patent against the Standard Oil Company of Louisiana for \$3,000,000.00, but such suit was thereafter settled. Prior to the institution of the last mentioned suit, we, on behalf of defendants in the case at bar, took the Shreveport depositions in which, as we have heretofore stated, many thoroughly reliable and highly qualified witnesses testified to repeated public uses of the identical subject-matter described and claimed in the Perkins patent, before its alleged invention. The Standard Oil Company of Louisiana assisted us to secure that evidence and furnished counsel and facilities to aid in its procurement, as the record will show. Such compromise was dictated solely in the interests of economy and business policy (being based upon the outcome of this suit, which it was then thought would shortly be tried) and was not entered into because anybody connected with the Standard Oil Company or any of its attorneys believed for a moment that the Perkins patent to be valid. If the terms of a license are satisfactory—if one doesn't have to pay anything for it—why litigate?

True, a preliminary injunction has been granted in the case at bar. Since granting it, however, Judge James has said:

“Upon the trial of the cause I may find otherwise. I don't know what your evidence will be at that

time: I can't anticipate it. I don't pretend to anticipate it in my mind even."

Necessarily, the evidence on which the motion was granted was in affidavit form. There was a conflict of evidence. This conflict led to a misunderstanding of the meaning and scope of the injunction. Evidence to aid in passing up the scope of the claim now offered was not before the court. Neither was there any evidence whatever attacking validity of the patent in suit on such motion. Since the issuance of such injunction the Shreveport depositions were taken. No court had, prior to the decree appealed from, ever passed upon them.

It is true also that defendants in this case have been punished for contempt for violating the preliminary injunction—although there is no question but that they were acting in the best of faith and under the advice of counsel.

The propriety of the punishment for contempt is before the court on the appeal from the final decree, not being otherwise an appealable order, and we shall later point out what we believe requires its reversal.

We urge that a direct passing upon the clear-cut material issues of the case at bar is the best way to do justice and to avoid confusion. Counsel will no doubt rely, as they did in the trial court, most largely upon prior proceedings, disregarding the issues here presented. We urge that such tactics should not be permitted to confuse.

The Principal Thing of Value, and the Only Thing That Is Really Contended for in This Suit, Was Dedicated to the Public at the Time of the Grant of the Patent in Suit, and Defendants in Their Use of It, Are, Therefore, Only Exercising a Public Right.

It will first be necessary under this head to define exactly the scope of the alleged invention in issue in order that it may be distinguished from property owned by the public or others.

The patent field is closely analogous to a tract of land composed of numerous subdivisions of various proportions, ownership of which is distributed among many individuals and the public. If the case at bar were an action for trespass on one of such parcels of land owned by a private individual, it would obviously be necessary to prove that defendant came within the *metes and bounds* of such parcel. A non-suit would of necessity have to be entered if plaintiff only succeeded in proving that defendant had been upon a contiguous parcel set aside as a public park. It would be foolish for plaintiff to argue in support of such a case that if defendant had kept entirely out of the vicinity and away from the public park the action would not have been instituted. Defendant, obviously, would have as much right in the public park as plaintiff on his own property. Defendant's right to even the last inch outside the private tract is as sacred as the right of the private owner to every inch of *his* property.

Now the exact legal description—the metes and bounds of the property charged in the case at bar to have been trespassed upon is *claim 2* of the patent in suit.

If instead of claim 2 the legal description of the property charged to have been trespassed upon was: "The east 25 feet, except the south ten feet of lot 1, block 4, in the east half of the northwest quarter of section 17, twp. * * * except * * *," it is clear that a disregard by the court of a single word or phrase in such legal description might make it apply to widely different property.

Let court and counsel distinctly understand, therefore, that it is our contention that every word and phrase in the legal description of the alleged invention here in suit, namely, claim 2, must be given some effect in determining the metes and bounds of the monopoly granted to Perkins and Double and the metes and bounds of what is dedicated to the public or of what are owned by other private owners. There can be no mistake as to the law in support of this contention; it is elementary.

Walker on Patents (5th Ed.), section 176, page 220, says:

"The claim or claims of a specification are necessarily inserted in order to conform to the statutory requirement that the patentee shall particularly point out and distinctly claim the part, improvement or combination which he claims as his invention. A distinct and formal claim is necessary to ascertain the scope of a patented invention, and a patent grants no exclusive right, except to what is thus distinctly claimed. To use the words of the Supreme Court, 'the claims measure the invention.'"

At section 177, page 226, the same author (Walker on Patents, 5th Ed.), citing many cases, says:

“In contemplation of law each claim of a patent is considered as setting forth a complete and independent invention.”

At section 181 Walker (5th Ed.), also says:

“To construe letters patent is to determine precisely what inventions they cover and secure. Nothing described in letters patent is secured thereby, unless it is covered by a claim, and no element not mentioned in a claim can be read into it even though the element appears in the specification. And a claim which is clearly narrower than the invention which it was designed to cover cannot be broadened by construction to correspond with that invention. Nor can a claim which is broader than the state of the art will allow to the invention described be narrowed by a construction out of harmony with its language. * * * The construction of letters patent depends therefore upon the construction of their respective claims * * * .” (Citing many cases.)

In the case of *White v. Dunbar*, 119 U. S. 51, the Supreme Court said:

“Some persons seem to suppose that a claim in a patent is like a nose of wax which may be turned and twisted in any direction by merely referring to the specification, so as to make it include something more than, or something different from, what its words express. The claim is a statutory requirement, prescribed for the very purpose of making the patentee define precisely what his invention is; and it is unjust to the public, as well as an evasion

of the law, to construe it in a manner different from the plain import of its terms.”

So clear are the foregoing statements of the law that perhaps it is superfluous to repeat the language of *Howe Machine Co. v. National Needle Co.*, 134 U. S. 394:

“Since the inventor must particularly specify and point out the part, improvement or combination which he claims as his own invention or discovery; the specification and drawings are usually looked at only for the purpose of better understanding the meaning of the claim, and certainly not for the purpose of changing it and making it different from what it is.”

Equally familiar is the decision in *Burns v. Meyer*, 100 U. S. 672:

“It is well known that the terms of the claims in letters patent are carefully scrutinized in the patent office. Over this part of the specification the chief contest generally arises. It defines what the office, after a full examination of previous inventions and the state of the art, determines the applicant is entitled to. The courts, therefore, should be careful not to enlarge, by construction, the claim which the patent office has admitted, and which the patentee has acquiesced in, beyond the fair interpretation of its terms.”

See also *Walker on Patents* (5th Ed.), page 220, Sec. 176; *Grant v. Walter*, 148 U. S. 554; *United States Peg Wood Co. v. Sturtevant Company*, 122 Fed. 472; *Continental Paper Bag Co. v. Eastern Paper Bag Co.*, 210 U. S. 405.

At page 352, Hopkins on Patents elucidates the law to the effect that the omission of a single step of a process claimed defeats a charge of infringement. At page 121 same author explains that each claim must speak for itself, and is in effect a patent standing by itself. At page 188 the author makes it clear by quotations and citations of numerous authorities that limitations contained in claims, whether inserted voluntarily by applicant or upon insistence of the Patent Office, cannot be disregarded.

Now, in the foregoing discussion of the law it has been our purpose to make clear *that every word and phrase in a claim must be given effect by the court in determining the scope of the monopoly covered by it*, otherwise the work of the Patent Office in insisting upon the insertion of words and phrases in limitation of its scope is wasted, and the great body of the law dealing with the interpretation of patent claims is ignored. Manifestly, every additional word and phrase in the claim narrows it in just exactly the same manner as every additional word and phrase in the description of land narrows it.

We insist that the patent monopoly in the present case is *no more and no less and no different* from the following description:

Claim 2:

“The method of cementing oil wells which consists of forcing cement down through the regular well casing by means of water pressure, the water being separated from the cement by a suitable barrier, forcing the cement up outside the casing, and holding the

cement in position under the water pressure until the cement hardens.”

When we come to consider specifically the question of infringement we expect to make clear from the application proceedings upon which the patent in suit was based THAT THE PATENT OFFICE WAS OF THE OPINION AND APPLICANT ACQUIESCED IN SUCH OPINION THAT THE REAL ESSENCE OF THE SUPPOSED INVENTION COVERED BY THE ABOVE QUOTED CLAIM CONSISTED SOLELY OF THE SEPARATION OF THE CEMENT FROM THE WATER BY A SUITABLE BARRIER TO PREVENT SUPPOSED DILUTION OF THE CEMENT BY THE WATER AND THAT THE PATENT OFFICE REFUSED TO GRANT THE CLAIM UNTIL SUCH LIMITATION AS TO SEPARATION OF THE WATER AND CEMENT WAS INSERTED. EVERYTHING ELSE IN THE CLAIM WAS THUS ADMITTED TO BE OLD.

Coming now to the specific subject of our heading, namely, dedication to the public: It should first be noticed there are two barriers illustrated in the drawings and described in the specification of the Perkins patent in suit, a top barrier and a bottom barrier. In cementing a well with this or any other process, the court doubtless has in mind that the first step is what is known as “securing circulation,” which consists of pumping fluid down through the casing and forcing it up outside the casing until it flows out on the ground outside of the casing at the top of the well.

The next step after securing circulation is, according to the process illustrated and described in the specification and drawings of Perkins (we are not now talking about what is *claimed*) consists of placing in the casing

the bottom barrier, after which sufficient cement to cement the well is pumped in on top of the bottom barrier. Then the top barrier with the spacer 14 is placed on top of the cement, the spacer extended down into the cement.

The next step consists of pumping pressure fluid on top of the top barrier to force it with the cement and bottom barrier below it down to the bottom of the well. The casing is raised less than the length of the spacer 14 from the bottom, and when the spacer strikes bottom, or strikes the bottom barrier, it cannot go any further. This slows or stop the pump and such slowing or stalling indicates to the operator that the cement is in its proper position outside of the casing.

As we shall see when we come to compare more fully defendants' process, it is not contended that defendants have ever used two plugs (or any barrier whatsoever). They have only used a plug with an extension below it, performing among other valuable functions peculiar to the Inskip patent the function of the spacer 14 of the Perkins specification. Defendant has never used such plug to separate pressure fluid from cement. Defendants' plug is always embedded in cement, for reasons hereinafter explained—*that is, it has cement above it and cement below it.*

Now, it is important for the purpose of considering the present defense, *i.e.*, the defense of dedication to the public, to note that the spacer 14 is clearly illustrated in both Figs 1 and 4 of the drawings of the patent in suit. Fig. 1 shows plainly the manner in which the spacer is intended to operate, namely, by striking the bottom while the upper plug is still within the casing.

In the specification of the Perkins patent in suit, it is said [R. 258, bottom of page]:

“When the post 14 strikes the bottom packer 8 which already rests at the bottom of the well, further downward movement of the packer 13 is positively stopped, and the packer 13 is arrested while its upper portion at least is still within the casing.”

The apparatus and mode of operation of the indicating feature of the top barrier with its spacer is thus most clearly illustrated and described in the specification and drawings of the Perkins patent in suit; BUT WHERE IS IT CLAIMED?

We have three claims in the patent in suit, in the first and third of which (not in issue in this case) both upper and lower barriers are claimed, *but only as barriers to separate water from cement*. In claim 2 only a single barrier is claimed. A short plug or disk without any spacer, or a wad of cement sacks would all constitute barriers. (It is in evidence that such sacks were used as barriers prior to Perkins.) But such short plug, or disk, or sacks, would perform no function as indicators. A “barrier” is not necessarily an indicator. The only claim in suit is limited to a “barrier.” THE ADDED FEATURES WHICH MAKE THE BARRIER AN INDICATOR ARE NOT CLAIMED.

If it had been thought desirable by applicants for the patent in suit to have *claimed* the method of using the spacer in connection with an upper plug as an indicator, that is *if they could have conscientiously sworn (as required by law) to inventorship of such feature*, this could easily have been done at the time of the application by

any number of other claims. For instance, such a claim might have been as follows:

“The method of cementing oil wells which consists of pumping cement into the casing, placing on top of the cement a plug having appended to it a spacer, forcing the plug down through the casing until the spacer strikes bottom while the plug is still within the casing.”

Or the allowance of apparatus claims for the combination of the plug, spacer and casing could have been requested. Various forms of claims covering the indicator will readily suggest themselves. THEY WERE NOT MADE.

Patentees undoubtedly could have claimed anything disclosed in the specification and drawing *provided they really believed it to be their invention and were willing to swear that they were its inventors in the oath forming part of their application required by law.* (See section 122, Walker on Patents, 5th Ed.) *They did not swear they were the inventors of the plug having appended to it a spacer or anything equivalent to it, nor did they claim they were the inventors of any method of cementing in which the position of the cement outside of the casing was indicated by the slowing or stalling of the pump resulting from the use of a plug or spacer as an indicator. The inference is that they did not claim this feature because they were not prepared to swear they were the inventors of it.* Perhaps they were conscientious and knew something about uses similar to those in the Shreveport depositions. The law as to dedication to the public is thus clearly stated by Walker on Patents (5th Ed.), page 221, section 176:

“Since all inventions, devices and improvements disclosed by the specification and not covered by a claim are dedicated to the public, all claims are required to be definite, so that the public may know what they are prohibited from doing during the existence of the patent, and what they are to have at the end of the term, as a consideration for the grant.” Citing *O. H. Jewell Filter Co. v. Jackson*, 140 F. R. 340; *Brooks v. Fiske*, 15 Howard, 212; *Buffington’s Iron Bldg., Co. v. Eustis*, 65 F. 807.

At section 186, page 250, the same author says:

“The developed and improved condition of the patent law leaves no excuse for ambiguous language or vague descriptions. The public should not be deprived of rights supposed to belong to it without being clearly told what it is that limits those rights. The genius of the inventor should not be restrained by vague and indefinite descriptions of claims in existing patents, from the right of improving on that which has already been invented. It seems to us that nothing can be more just and fair, both to the patentee and to the public, than that the former should understand, and correctly describe, just what he has invented, and for what he claims a patent. ‘As patents are procured *ex parte*, the public is not bound by them, but the patentees are. And the latter cannot show that their invention is broader than the terms of their claim; OR IF BROADER, THEY MUST BE HELD TO HAVE SURRENDERED THE SURPLUS TO THE PUBLIC.’” (Capitals ours.) (Citing among others *Merrill v. Yeomans*, 94 U. S. 573; *Burns v. Myer*, 100 U. S. 672.

The plain intent of the claim (and this will even more clearly be made to appear when we come to consider the application proceedings upon which it was based) was to

cover the separation of the pressure fluid from the cement to prevent dilution; and we urge that the claim is incapable of any interpretation (without ignoring its plain terms and intent and rewriting it to make it express something different from what its words express), which would cover the feature and apparatus necessary to make a barrier operate as an indicator, namely, the spacer and the casing raised less than the length of the spacer from the bottom.

We submit, therefore, that the added feature and operation necessary to transform a barrier into an indicator were dedicated in the patent in suit to the public by failure to claim, and that the use of a plug with a spacer, cement being placed on top of the plug so that it does not form a barrier to separate fluid from cement was open to use by any member of the public, and that when defendants use it they only exercise a public right, which right is as much entitled to recognition and protection as the subject matter distinctly claimed in claim 2 of the patent in suit.

The Shreveport Depositions Established Not One But a Number of Defenses, Any One of Which Authorizes the Dismissal of This Suit. In Such Depositions It Is Proven That the Identical Subject-Matter as Described and Claimed in the Perkins and Double Patent in Suit Was Known and Used Around Shreveport Before the Alleged Invention of the Patentees in Suit.

The statute, Title 35, Section 31, U. S. C. (formerly section 4886, R. S. U. S.) provides that any person who has invented any *new* * * * art * * * or any *new* improvement * * * may have a patent, etc.

The defenses we are now to consider are that at the time of the alleged invention of applicant for patent in suit the subject-matter of the claim in suit was not new. Plaintiff has not attempted to prove any earlier date of alleged invention than the date of the application for the Perkins patent in suit, namely, October 27, 1909.

In the Shreveport deposition we earnestly urge on behalf of defendants that we have clearly and conclusively proven that the subject-matter of not only claim 2 in suit, but of all the claims of the patent was known and used around Shreveport prior to the date of alleged invention of the patentees in suit, namely, prior to October 27, 1909.

In Walker on Patents (5th Ed.), section 71, the author states the law as follows, supporting it by numerous citations of authorities:

“Novelty is negated by prior knowledge and use in this country by *even a single person of the thing patented*. This rule applies even to cases where that knowledge and use are purposely kept secret.”
(Italics ours.)

At section 73 the same author also says:

“Negation of novelty is not averted by the fact that the inventor had no knowledge of the anticipating matter when he made the invention covered by the patent. The patent laws do not reward people for producing things which, though new to them, are old to others in this country.”

The Shreveport depositions consist of the positive and direct testimony of those who actually used, directed the use, or were present at the time of the use of the process described and claimed. Logs of wells and other records

giving dates and corroborating the testimony are produced.

This evidence is met only by the testimony of others who say they were in the field and that they did not know or hear of such uses. It should be noted that these uses were not many months prior to the application for the Perkins patent in suit. The process of using plugs was then comparatively new. It is not at all surprising that many could be found who were in the field at the time and yet who did not know or hear of the method. That a contractor beginning the use of a new method of cementing would immediately advertise the fact far and wide throughout the oil fields is quite unlikely. He would be more likely to be secretive about it. To broadcast the idea would only be to help his competitors

The state of the record on the defenses of prior use may be set forth clearly in a very few words: On behalf of defendant there has been produced the testimony of fifteen thoroughly reputable, highly qualified and unimpeached witnesses who testified *directly and positively that they actually observed the use of plugs exactly, in many instances, as described and illustrated in the Perkins patent, and in these and other instances exactly as claimed, on various jobs around Shreveport prior to the date of alleged invention of the patent in suit.* Names, locations, and logs of wells are produced. These witnesses have testified to repeated uses, many of them corroborating each other as to specific instances. In rebuttal, on behalf of plaintiffs, the testimony of probably an equal number of witnesses is produced, many of them oil field workmen unemployed at the time of giving depo-

sitions (see Eldorado depositions particularly) who testified in effect that they did not know of such uses. Fifteen men swear directly and positively that they saw the defendant steal the horse; fifteen others say that they *didn't* see him steal the horse. Is this a "conflict in the testimony?" Has the fact of stealing been proven?

Plaintiff's rebuttal testimony is negative. There is not the least doubt but that plaintiff could have procured the testimony of five hundred witnesses who did not know of the prior uses relied upon. Remember again that some of our most important uses were only a few months prior to the date of the alleged invention of the patent in suit. It is, therefore, not at all surprising that the facts had not been so widely circulated throughout the oil fields as to be known by everybody. However, we believe that the evidence of the Shreveport depositions shows that the use of this process was pretty thoroughly known among those active in the drilling and cementing business some months prior to the alleged invention of patentees in suit, regardless of what any witnesses on behalf of plaintiff may have intimated to the contrary.

Remember, however, as we have seen, that all that is necessary to sustain the defense of prior use is a *single* use which might have been known, under the law, to only a single person. (Walker on Patents, (5th Ed.), section 71.) Hopkins on Patents, at page 421, collects numerous authorities to the effect that a single sale or use will establish this defense. In the case of National Casket Co. v. Stoltz, 157 Fed. 392, the unsupported testimony of a single witness was held sufficient to establish this defense.

We wish to emphasize the following important circumstances: The date of application for the patent in suit is October 27, 1909. The date of alleged invention is admitted not to be earlier than this date of application; that is to say, patentees do not attempt to carry back their date of invention prior to their date of application. A patent application, of course, is secret in the patent office. It is not asserted or contended or even suggested that the patentees in suit first introduced the process into actual use. The patent was not granted until nearly two years after the date of application, December 12, 1911. Now, there is no controversy whatsoever, in fact it is admitted by witnesses on both sides, that the process exactly as described in the claim in suit was widely and generally used in the territory in which the prior uses occurred at least as early as the beginning of 1910 (this was only two months after the alleged invention). *How could the process so suddenly have come into wide-spread use if it had not been known some time previously?* Important improvements in apparatus and process do not blaze suddenly into wide-spread use. They must first be discovered and then experimented with for perhaps months or years. Those who discover them are usually secretive. There is no reason why they should give the world the benefit of their discoveries or experiments, especially until they have had ample opportunity to try them out. The admitted wide-spread use as early as the beginning of 1910, we submit, is the *strongest corroboration* of the testimony of the many witnesses that the first definite use of the wooden plug as an indicator was early in 1909 (although cement sacks

used as indicators and sacks filled with shale used for the same purpose were known and used at least a year previous)—and after such first use of the wooden plug its use gradually increased throughout the year—all prior to the alleged invention of Perkins and Double.

The Use of Bundles of Cement Sacks and Sacks Filled With Shale as Indicators.

It is clearly established that beginning sometime in 1908 (nearly two years before the alleged invention of the patentees in suit) bundles of sacks were rolled together and placed on top of the cement that was being pumped down through the casing to cement the well. These bundles acted both as barriers and as indicators. Sometimes a sack would be filled with shale and used as a plug.

For instance, at R. 566, about the middle of the page, Walter George, a drilling contractor, who had been connected with the oil business one way or another ever since 1901 in various capacities which would throw him in contact with the cementing of oil wells at the time of particular pertinence to the present inquiry, testifies:

“We put sacks, a few sacks on top of the cement and put the water on top and forced it to the bottom. * * * The sacks were put in when the cement got up around the six inch, the sacks would fill up the hole between the six inch and the wall, and that would have a tendency to plug off the pump and you would know that the cement was behind the six inch casing. We pumped pressure fluid in on top of the sacks which pushed the sacks to the bottom of the six inch casing.”

Again at the middle of R. 567, Mr. George also testified:

“After the sacks got below the 4 inch casing they stayed on top of the cement and plugged off the hole. * * * The sacks were used for a plug and an indicator to plug the pump.”

[R. 568]:

“It had a tendency to plug the pump off; by forcing the cement around behind the casing, it would stop the pump. * * * That method was first used on a well known as Broussard number one, near Oil City.”

[R. 569, middle of the page]:

“At that time nothing but sacks were used. We did not use wooden plugs, but sometimes we put shale in the sacks * * *.”

[Near bottom of R. 569]:

“We put some shale in the sack and dropped it in on top of the cement and pumped it down. That was used the same way as the other sacks; it stopped the cement when it got behind the casing, when it got at the proper place * * *.”

[R. 571]:

“Referring again to the method in which the bag or sack containing shale was used, when the shale bag would hit the bottom we found out the shale bag was better than just the sacks because it would stop up the entire six inch casing—that was what we were using at that time, most of us, six inch, and it would stop the pump and check it off and we knew that the cement was behind the casing and we set back

on bottom leaving the pressure on it and leaving it to set.”

[R. 585]:

“We used some sacks on Childs 1, I think it was the first one. There might have been some shale in the sacks. I don’t remember whether there was or not.”

Log of Childs No. 1 well is copied into the record at page 738 and shows drilling commenced November 7, 1908, and completed December 12, 1908.

[R. 590, about one-third down the page]:

“I cemented Childs No. 1 in the latter part of 1908, took the job in January, I think; the well was cemented and set there over the Christmas holidays before that. I am not positive whether we put shale in the sacks or just put the sacks in on that well. We used this 4-inch drill stem.”

At R. 591, first paragraph, the witness fixes the date for the drilling of Broussard No. 1 as in May, 1908.

At R. 593, the witness says that he was on Childs No. 1 in November, 1908, and finished up that well in January, 1909.

Again at R. 594, the witness states that he finished the Broussard well not in January, but in May, or the early part of June.

At R. 611, he again explains fully how Childs No. 1 was cemented and emphasizes the indicating feature of the sacks.

At R. 612, top of page, he says:

“We would put on top the cement at the top of the drill pipe before we started, and put the fluid in on top of the cement, and then we would put in a sack. I don’t think it was one sack, and I don’t think it was a dozen; probably two or three; I cannot say definitely. They were cement sacks, but up and cut the seams out of them and put them in; roll them up and put them in. Not necessarily roll them up all together. On the Childs No. 1 well we cut the seams out of them and put them in, as well as I remember, one at a time; folded or rolled. McCann & Harper were doing that Childs No. 1 job on contract. I was present at the operation myself.”

At R. 612, he mentions Harmon Mahaffey, Fred Kyle and Lem Pyle, Mr. McCann, one of the contractors, and Harper, the other contractor, as being present.

At R. 613, he mentions a number of other wells which were cemented by the same system or by the use of plugs.

Mr. George is corroborated by Harmon Mahaffey [R. 632], who states that he was in the well drilling business since February 12, 1908, and that during 1908 and 1909 he was employed by McCann & Harper, who were operators in the Caddo field and who did operating work. At that time he was roughnecking for McCann & Harper and he cemented some wells and assisted them in cementing others. [R. 633.] This witness’ testimony is recommended to the court for careful reading. He was very positive and gives good reasons for remembering the dates. He was with Mr. George on the Broussard well. He also corroborates Walter George as to

the use of sacks on Childs No. 1 [R. 634], and referring to this last mentioned well, he says [bottom of R. 634]:

“Sacks were used for a plug to tell us as near as it could when the cement was around the bottom of the 6-inch—when the cement went around the bottom of the 6-inch; this it did by causing the pump to either stop or labor.”

At R. 635 he describes again, specifically, by particular reference to the Childs No. 1 well, how sacks were used for cementing.

Another witness who corroborates the testimony as to use of cement sacks in 1908 is J. R. Crawford [R. 662], who testifies that he is a drilling contractor and producer of oil, having been engaged in the business about twenty-one years, having been a contractor for thirteen years. At R. 671, middle of the page, he says that it was about the latter part of 1908 that the use of cement sacks as indicated, or sacks of shale, first came to his knowledge. He states that in the latter part of 1908 [R. 671, bottom of page] that he could not make a statement as to how extensive the use was, but that there were several instances about that time. He says that it was quite well known the latter part of 1908 that is to say [R. 672, bottom of page], it was talked of among the drillers, but there wasn't a great many of them at that time in this part of the country.

Another important witness is Hearne Harper [R. 707], who testifies that he is an oil well contractor and producer, having been contracting since 1905. He was of the contracting firm of Harper & McCann [R. 707], employed Walter George as drilled, and Harmon Ma-

haffey and others to be later referred to, in 1908 and 1909. At R. 731, Mr. Harper explains and refers to the use of cement sacks, stating that Childs No. 1 [R. 730] was cemented in the latter part of 1908 and [R. 731] explained how the sacks were used and how they fit the inside of the casing and how they stalled and stopped the pump to indicate when the cement was outside of the casing. He also mentions other wells that he cemented by the use of this method.

At R. 738, the fixing of dates by the witnesses whose testimony has been heretofore partially quoted, is corroborated by the production of the log of Childs No. 1 well and by reference to this log Mr. Harper testifies that the well was begun on November 7, 1908, and completed December 15, 1908. The date is thus established beyond any possible doubt.

At R. 741, Mr. Harper refers to the Richardson well as having been cemented with sacks along about this time, and describes how the sacks were used to act as indicator to slow and stop the pump.

The log of Richardson well. (Note, R. 767, middle of page, that these logs are copied into the record at the request of counsel for defendant.) The logs were contained in a book, copies of which were sold for one thousand dollars each, and it seemed to be out of the question to compel the originals to be tied up in court. They were also very bulky and contained a great many other logs of other wells not at all pertinent to any of the issues in this case. The log of the Richardson well shows that it was begun on December 7, 1908, and completed January 3, 1909. [R. 767.]

At R. 809, the testimony of W. C. Wolfe is found. Mr. Wolfe was president of the Keene-Wolfe Oil Company, a corporation which were producers and refiners and distributors of oil. He testifies he has been engaged in the oil business since 1902. He did work for the contracting firm of McCann & Harper; he was in charge of the drilling and production department of the Caddo Gas & Oil Company. He was acquainted with Hearne Harper. He came to the field in 1907 and was employed as a driller for McCann & Harper. In the latter part of 1908 and in the spring of 1909 he was a contractor; he organized the Wolfe Drilling Co. in September, 1908, and began drilling wells under contract for the Gulf Refining Company and others. He says in the latter part of 1908 and in 1909 he had knowledge of processes then used for cementing oil wells. At the bottom of R. 810 he refers to the use of cement sacks or tow sacks rolled together and tied up three or four feet long, along about this time, and also of the using of plugs or barriers, which will be considered under another head.

We are now considering the beginning of the use of plugs or barriers or indicators and it will be apparent to the court that a cement sack or a bundle of sacks or a sack of shale, whether used as an indicator or not, so long as it is placed between pressure fluid and cement, comes within the letter and spirit of the claim in suit which calls for a barrier to separate pressure fluid from cement. As we shall see, the use of wooden plugs quickly followed the use of cement sacks and most of the testimony in the record of prior use is directed to specific instances of the use of such wooden plugs. It is

most reasonable to believe that the use of sacks of shale, as testified to by the many witnesses heretofore referred to, preceded the use of the wooden plug.

At R. 845, L. A. Pyle testifies. He says he is working in the oil field as a tool pusher, having been engaged in that occupation since December, 1907. [R. 846.] That he came to the oil field in 1907 and that later (same page) he was working for Walter George, who was a driller for McCann & Harper as contractors; that he is acquainted with the manner in which oil wells were cemented in the latter part of 1908 and in the spring and summer of 1909. At R. 847 he also refers to the use of cement sacks or sacks of shale and describes fully how they were used as indicators. He further explains details of such use at R. 848, and at the bottom of R. 849 he states that they would shut the pump off. He says:

“After the sacks reached the bottom of the drill stem we pulled the drill stem out, connected the swivel onto the casing, picked the casing up far enough to get circulation, started the pump on the casing and the sacks would shut off at the bottom again. The sacks would stall the pump when they reached the bottom of the drill stem.”

Remember again that while the use of a cement sack or a sack of shale as a barrier comes as literally within the meaning of a claim as does a wooden plug, the claim not specifying the nature of the barrier nor the size or shape of it, we have directed most of our specific instances of prior use to the actual use of one or more plugs exactly as described in the patent in suit, and under the following head we shall give references and quotations from some of the most important testimony of record relating to such use.

One of the Early Specific Instances of the Use of Sacks as Indicator, Pardue Well No. 1.

The log of this well (Pardue No. 1) is copied into the record at page 735, and shows that the drilling of the well was commenced November 9, 1908, and was completed November 27, 1908. Near the bottom of R. 730, Hearne Harper testifies as to the manner of cementing this well, saying that they rolled up a bunch of sacks and put shale in it [R. 731]:

“We made a good big roll so it would fit tight inside of the casing, and then put our mud on top of that.”

He further says [R. 731]:

“They pumped pressure fluid on top of it, until the pump stopped.”

On the same page, he says:

“The sacks were put in there to let us know when we had the cement all pumped out of the casing.”

They also used it with the idea that it would prevent the mud from mixing with the cement [near bottom R. 731] the witness says:

“We used it for two purposes there.”

The testimony of Harper is corroborated by that of Wesley Jordan. At R. 860, Mr. Jordan, who was at the time of his testimony superintendent for the Ray Hawthorne Oil Company and who had been following drilling operations since 1905, testifies [R. 859] that he went to work in Oil City on the afternoon of October 28, 1908, for McCann & Harper Drilling Com-

pany. He says he worked for them just a few days as a helper and then went to work running a rig for them the first part of November, 1908. [R. 859.] At R. 860 Mr. Jordan refers to the first well that he cemented as being the first well he drilled for them after he went to work; that was the Pardue well No. 1, under discussion. He describes fully [R. 860] how this cementing was done, fully corroborating Hearne Harper.

The Prior Use of Sacks as Indicator at Childs No. 1.

The log of Childs No. 1 is copied into the record at page 738 and shows that the drilling was commenced November 7, 1908, and the well was completed December 15, 1908. Mr. Hearne Harper, referring to and producing this record, makes the positive statement that such dates are correct according to his recollection. At that time, as the court will remember from the synopsis of prior testimony, Walter George was a driller employed by McCann & Harper. At R. 590, Mr. George testifies that he cemented Childs No. 1 the latter part of 1908. At R. 593 (bottom of page) he says:

“In November, 1908, I was on the Childs 1. I finished up Childs No. 1 in January, 1909.”

At R. 611, Mr. George again refers to the cementing of Childs No. 1 and states that they put sacks in there to indicate when the cement was behind the casing. At R. 612, about one quarter down the page, he says:

“On the Childs No. 1 well we cut the seams out of them and put them in, as well as I remember, one at a time; folded or rolled. * * * That was in the Childs No. 1 well. That was McCann &

Harper doing the job on contract. We contracted that well for B. G. Dawes and associates.”

Harmon Mahaffey, who has heretofore been sufficiently introduced to the court, at R. 632 corroborates Harper and George, at R. 634 stating that he was present at the cementing of Childs No. 1, and at the bottom of R. 634 and R. 635, describing fully how the work was done. Beginning at the bottom of R. 647 and extending over on pages 648 and 649, the witness fully describes the method of cementing Childs No. 1.

Prior Use of Sacks of Shale as Indicator at Richardson Well.

The log of this well is copied into the record at page 767. The contractors are McCann & Harper. The log shows the drilling was begun December 7, 1908, and completed January 3, 1909. Mr. Harper, the contractor, testifies that this well was cemented with a sack of shale used as an indicator between the dates last given.

At R. 709, Mr. Harper refers to the drilling of the Richardson well beginning in 1908, stating that he fixed the date by a copy of the contract. Near the bottom of R. 709, a certified copy of the contract is produced and identified by the witness who states that the contract shows that in December the drilling was commenced. (This was afterwards checked by production of the log of the well.) At the middle of R. 710, the witness states:

“One reason I can remember about that well is I think it is the only well that was ever shot with nitro-glycerin to try and make it produce oil in the Caddo oil field.”

At the bottom of R. 710, the witness describes the practice and use of logs of oil wells.

The complete records of these wells were afterwards produced by witness, Mrs. Newcombe [R. 820], and by stipulation were copied into the record.

At the top of R. 714, the witness states that the complete logs of the different wells are kept by witness Newcombe, and that she sells her books containing them for one thousand dollars each. This was the book afterwards produced and logs from which were, by stipulation as above referred to, copied into the record.

The Richardson Harper contract referred to the well under consideration, has been offered in evidence as Defendant's Exhibit No. 3.

At the top of R. 741, the witness Harper further testifies:

“This Richardson well was cemented with sacks. We set the casing—after making the hole for it, near the bottom of it, got circulation, got it all washed out clean, and after we done that we run some pipe into the well, say two or three hundred feet, and then pulled it out, poured our cement in it, made a plug with sacks and put it in on top of the cement, connected our swivel up to the top of it, started up our pump and kept the pressure against it, lifted the casing off bottom a few inches, pumped it until it shut the pump off, and then let the casing back on bottom and let it set there for four or five days, and then drilled it in and made about a 5000 barrel well, I suppose, something like that, as well as I remember. We determined when the cement was outside of the casing by these sacks we put in there. When they got to the bottom of the casing there

wasn't room enough so that we could pump them on out, and they stopped in that small opening at the bottom and slowed the pump down or stopped it."

Near the bottom of R. 742 the witness testifies that this job of cementing with others was a successful one.

Generally as to the Use of Wooden Plugs as Indicators or Barriers in Cementing.

The use of wooden plugs as indicators quickly generally followed the use of sacks either rolled or filled with shale.

One of our best qualified witnesses is Walter George, [R. 564], to whom we have heretofore referred and who was actively employed as a driller for McCann and Harper beginning with the work on the Broussard well near Oil City in the spring 1908. [R. 565.] We have heretofore quoted Mr. George's testimony as to the use of sacks. Rt. R. 571 Mr. George says that besides sacks with shale they also used wooden plugs. He says the first use of wooden plugs that came to his knowledge was on the Christian well, to which we will specifically refer later as one of the specific instances in this case. Referring, however, generally, to the use of plugs, the witness at R. 578 states, "I have used the system [with plugs] since 1908, and I didn't know there was a patent on it until September, 1923." We shall later refer to this witness' testimony in connection with specific instances of use. At R. 589, however, speaking generally of the use of the plug, he says that his partner McCann favored the plugs and that he brought the plug out and had Harper put it in. This was in 1909, prior to the alleged

invention of the patent in suit. At R. 617 George mentions the different wells that this plug system was used on and at R. 618 (middle of page) he says that by 1910 this method had practically become universal in the Caddo field, that is, the plug method, and that nobody by 1910 was using sacks; everybody used plugs. "As far as I know they all used the plug system." At the bottom of R. 626 he says that the one-plug method as an indicator was in his experience, successful in most instances. He says [last line of R. 626]: "I haven't heard of two plugs being used in years."

At R. 639 Mahaffey testifies that the process of cementing with the plug as an indicator used according to his experience for the first time in the early part of 1909 is used for cementing in substantially the same way as at present, at the time of giving his testimony.

At the bottom of R. 661 Mr. Mahaffey, speaking of the first use of the plug on Christian well 1, to be later specifically considered, in the early part of 1909, being asked on how he happened to be so positive that the plug was used at that time, testified [last two lines R. 661]:

"WELL, HOW I HAPPEN TO BE POSITIVE IT WAS USED IS I MADE THE PLUG MYSELF, AND MY REMEMBRANCE IS I PUT THE PLUG IN THE HOLE MYSELF; THAT WAS A NEW THING AT THAT TIME; THAT WAS MY FIRST ONE."

At R. 666 Mr. J. R. Crawford, referring to the cementing of Powell No. 1 well, described how a plug was used. This was in January or February of 1909. At R. 672 Mr. Crawford testifies:

“I don’t know that I could give you the approximate number of wells that was cemented during 1909 with such a wooden plug as I describe in this field; I know of wells which were not cemented by such process by 1909. I understand at that time the Texas Company did not pretend to use the cementing system at all for the reason that their superintendent had had a patent or was trying out a packer that he had invented. I don’t know whether he had patent on it or not; anyhow, they were using that packer and trying it out and if they cemented any wells during 1909 I had no knowledge of it.”

The witness Walter G. Ray [R. 691], a drilling contractor and producer who started in the field in 1908 and commenced contracting about 1912, states at the top of R. 704, corroborating other witnesses, that his company had used that plug method on a well known as Powell No. 1, and he says:

“We have been cementing by it since 1909. Every well we have cemented, every well I have worked on.”

At R. 724 Hearne Harper, to whom we have heretofore referred as the partner of McCann, contractors at that time, testified [bottom of R. 724] that during the years 1908 and 1909 the indicator method was used and [near the bottom of R. 725] he describes fully how the wooden plug was used as an indicator. In the middle of R. 726 he says after the cement was outside of the casing,

“We left our swivel connected to the top of the well with the pressure on it so that the cement would not come back.”

At R. 755 appears this testimony by Hearne Harper, the partner of McCann:

“Q. By Mr. Westall: And how did you order these wells that were cemented in 1909, say between the time of the cementing of Christian No. 1, which I believe you stated was in March, 1909, up to October, 1909? A. My orders were to use cement with plugs or sacks and Mr. McCann was a little doubtful which was the best, and he cemented some by running the drill stem down at the bottom of it, as I have described, and doing it that way, and in some of these wells it was siphoned down by pouring it in in that way, as I have told you, and some of them he used the plugs.”

At the bottom of R. 810 Mr. W. C. Wolfe, heretofore introduced to the court under the last preceding heading, testified to his first experience with the use of plugs for cementing in February or March of 1909, describing that experience, as on Powell No. 1 (to which we shall later specifically refer). At R. 811 he describes this use. At R. 812 the witness Wolfe describes fully how the plug was used in cementing and he states specifically [bottom of R. 812]:

“In the early part of 1909 and prior to October 1, 1909, there were quite a few wells on which that process of cementing in which plugs were used through casing was used, and there was a number of concerns didn't use cement at that time, but there was quite a few that did use cement.”

At R. 817, referring to the use of two plugs and comparing the two-barrier system with that of the single plug, he testifies:

“Q. By Mr. Westall: You spoke of the use of more than one barrier. Please state to what extent the use of two barriers or plugs has continued to the present date, explaining the matter fully.

A. The method of cementing when they first began cementing here it was the opinion of a great many of them that where the cement was put in on top it was liable to mix with the mud and prevent the cement from setting, and in some cases the different concerns employed the use of two plugs or two barriers, one plug or barrier being placed below the cement and one above the cement, separating the cement from the mud or water below, and also separating the cement from the mud or fluid pumped in above the cement. Since that time, however, a great many of the concerns, included among which has been myself, only use one barrier or plug to act as an indicator to let us know when the cement was out of the casing. We have had just as much success with the use of one plug as we did with the two plugs.”

In connection with the use of plugs we call the court's special attention to the testimony of Tipton A. Snell, beginning at R. 834. Mr. Snell is a lawyer by profession, but occupied at the time of giving his testimony in the oil business. He says he was first engaged in the oil business in 1906 and at R. 835, middle of page, he fixes positively the time at which a certain use referred to by him was had. At the bottom of R. 835 he explains that the cementing process at this time (1906) was new to him and at R. 836 he explains how a separator and indicator was used. He says that a piece of board was cut to fit the casing, then a two-foot stick was nailed at right angles to the plane of the surface of the disk

made by the circular board. The purpose of this stick was to hold the disk horizontally in the casing. He explains that cement was pumped into the well and this disk with the stick nailed below it was placed on top of the cement [R. 837] and the whole was pumped down to the bottom of the well with the stick acting as the spacer, (illustrated as 14 of the patent in suit) and stalled and stopped the pump. This evidence is the earliest use of record of the indicator. Mr. Snell appears to be a man of credibility and standing and there is no reason why his testimony even of this early use (1906) should not be believed.

At R. 851 the witness L. A. Pyle testifies to the use of wooden plugs beginning early in 1909. At R. 855 he explains that the Texas Company was about the last company to adopt the cementing method, because, he says, Mr. Clayton, their superintendent, had a patent on a packer known as the Clayton Packer and he was trying to make his packer go. At R. 856 he testifies to the entire success of the use of the plug as an indicator beginning early in 1909. [R. 865, Wesley Jordan refers to the continuous use of plugs according to his knowledge for cementing since early in 1909.]

At R. 872, Richardson, an oil producer, who was producing oil from the latter part of 1908 and up to October 1, 1909, in the Caddo field near Shreveport, testifies that he knew of the firm of McCann and Harper, that they were well contractors, that they were in business from 1907 until a few years ago, and that he had a contract to drill a well for McCann and Harper in 1908. At R. 874 he testifies to the use of the plug method in that well at that time, fixing the date by reference to

the contract. At R. 875 and 876 he explains that a great many wells were cementing by that method after April, 1909. In the bottom of R. 876 he says that plugs were generally made out of an old field pine; that was the general method at that time, and that he is a producer of oil at the present time and is using the same method that he first became acquainted with early in 1909. At R. 877 he states that he usually has used two plugs and has been doing it for years. Early in 1910 he says he actually got on the derrick floor and superintended the cementing of the wells himself.

Specific Prior Uses of the Use of Plugs as Indicators and Barriers. Christian Well No. 1.

(Log of well [R. 603] shows drilling commenced March 19, 1909, and completed April 14, 1909.)

Practically all the crew on this well testified to the use of plug as a barrier and as an indicator early in 1909, including one of the contractors who had charge of the job, a driller and helpers on the job. *We produce the man who actually made the plug and put it in the casing.* This being his first experience, it was strongly impressed on his mind. There can be no possible doubt as to the date when this prior use occurred, as we have produced the record of the log of the well showing the date. This testimony is to be considered in the light of circumstances that preceded it. Remember the field at that time was not exceedingly well developed; there were only a limited number of wells being drilled and yet there had been, as we have before seen, a considerable use of the cement sack or the sack of shale as a barrier as well as an indicator. This use of the cement sack

had continued from 1908, which was a year prior to the date of alleged invention of the patent in suit. The witnesses who have testified concerning this prior use are well qualified, credible and unimpeached. There is no conflict whatever in their testimony nor is there anyone who ventures to dispute their word. There is no reason why the court should not accept their statements. If their evidence with its corroboration does not prove this prior use, we submit that it would be impossible to prove any prior use in any patent case.

Walter George, who, as we have seen [R. 565], was a driller, working for McCann & Harper at the time of the use to be now considered and who is now a drilling contractor, was the first to testify concerning this use. We have heretofore considered his testimony relating to the general use of plugs and the preceding use of sacks folded or rolled or containing shale. At R. 569 Mr. George testifies that the first wooden plug he knew about was a well that Harper drilled known as Pardue well No. 1. He does not testify as to actually seeing this use, but his testimony as to his knowledge of the use is not objected to and is corroborated by a number of other witnesses. [R. 569, at top of page] Mr. George says: "The first I used was on a well known as the Christian Well No. 1." At R. 572, middle of page, he says that was in March or April of 1908, but near the bottom of R. 572 he quickly corrects this by saying that he meant the spring of 1909. He states that at the time of cementing this well he was employed by the contractors McCann and Harper.

At R. 573, middle of page, he states that there was a man by the name of John Burrows who was present,

who at the time of giving the testimony was dead, and there was also a fellow by the name of Harmon Mahaffey, Fred Kyle and a fellow by the name of Crawford, who was foreman on the job, and there was another man or two. At the bottom of page 573 he says that was a successful job and they brought in a big gas well and they did fine. At the bottom of R. 575 he says on the Christian job Mr. McCann was superintendent, Mr. J. B. McCann, and there was another man whose name he does not remember. Again, at the bottom of R. 585, he reiterates that the first wooden or solid plug used by the witness was on this Christian Well No. 1. At R. 590, top of page, he explains the advantage of the plug used in the Christian well over the former methods that he had described, the use of sacks; he says:

“This made a better plug than the sacks did; by that I mean it cut the pump off better; stopped circulation. The others didn’t do as good as the plug did; sometimes they would leak, would not stop up the bottom of the six-inch as good as the plug.”

At the bottom of R. 603 the log of the Christian Well No. 1 is copied into the record and this shows that the drilling was commenced in March, 1909, and completed April, 1909. This of course is conclusive on the question of date and the witnesses all say that either they remember the time positively or that when their recollection is refreshed as to the log they can testify definitely that such was the date. At R. 614 Walter George says that Harper was present at the Christian well and at the middle of R. 614 he describes the cementing specifically of the Christian well by the use of the plugs,

first, however, referring to a prior attempt to cement with other methods which failed. Beginning in the middle of R. 615, he describes specifically how the cementing of Christian Well No. 1 in the early part of 1909, many months prior to the alleged invention in suit, was carried out, saying:

“The hole was full of fluid. As soon as we got it clear we made enough displacement in it to get cement in there. We made the displacement because we had to have room to put the cement. After we got our displacement we put the cement in there. Then we put the plug on top. The plug was a pine pole cut out with an ax, something like five inches, with some sacks or some wrappers nailed on top; might have been both sacks and wrappers, I don’t remember. Some of the crew made that. I don’t remember just who. Harper thought about the plug. I don’t remember whether I had ever heard of it before or not. I don’t remember the exact length of that plug. It was trimmed enough to go inside freely down through the 6-inch and then we had to cut it and tried to make it the length of the hole, the open hole we had below the 6-inch, just so it would pass low enough below the 6-inch so the cement would stop. In other words, the plug was about the length of the amount of hole we had under the 6-inch. We were using that as an indicator to tell us when the cement was behind the casing. We put the cement sacks on top so it would make the plug—so it would stop the pump when it hit the bottom.

Q. The sacks on top formed such a plug as to convert it into a complete barrier between the fluid above it and the cement below it; is that correct?

A. Well, you can call it a barrier if you want to. It was a plug to stop the pump when it hit the

bottom. After we got that plug to the top we put the swivel on and pumped it down. I don't remember just whose idea it was. It was Mr. Harper's idea to put the wooden plug in there, and it didn't take much idea to pump it down after we got it in there. That is what it was made for."

Harmon Mahaffey was the next witness who testified distinctly and positively as to this prior use on Christian Well No. 1. His testimony is very convincing because he says [R. 637, near the top of page], It was the first well he ever saw a plug used on. He says he don't remember the date, but he does know that it was in corn-planting time, that is, a little corn was up at that time. At R. 637 he says the year was 1908, but he quickly corrects the date by saying [R. 638] it was in 1909. In the middle of R. 638, when interrogated particularly regarding the date, he says:

"I meant 1909; I withdraw the first statement if I said that. The plug we used was on Christian No. 1 well, was made out of a pine sapling six or eight inches in diameter to fit the casing it was to go in. I made it myself. The whole crew was present when I made it. The crew was Fred Kyle, Johnnie Burrows; he is dead now; and there was a fellow named Crawford; I don't know his initials, and I believe Lem Pyle—I am not positive about Lem Pyle; I wouldn't say; I am not positive about Lem Pyle. He was a roughneck. He is now in Cotton Valley. There was Fred Kyle and Crawford and Lem Pyle and Walter George; he was the driller, and another fellow there—I be dogged if I can remember his name. Let's see; there was Lem Pyle, Crawford—I believe that is all I can remember now."

At R. 641, still speaking of the same prior use (near the bottom of page), he says: "The plug was used to shut the pump off. I am sure of that," and showing the nature and positiveness of his recollection, in the middle of R. 642, he says:

"I can remember approximately the time in which these other different wells I drilled were worked on; I think all of them."

And a few lines later on the same page [R. 642, middle of page], he says:

"I heard them say they had a copy of the log of the well, but I never read it and never saw it. They asked me if I could remember when it was, and I told them I thought I could and I told him to the best of my recollection when I thought it was, and they told me that was about right. They did not tell me what dates the log showed, not at any time."

In the middle of R. 645 the witness further testifies:

"After the blow-out I think it was about two days before we started the cement down on that second job with the plug. The idea of using that plug was J. B. McCann's. He ordered it made. I don't know whether he told me direct; he told Walter to make it; anyway, I got the order and the order come through him. I believe he was at the well between the time of the blow-out and the time we started this cementing job with the plug; I don't remember. I ain't going to tell you anything unless I know positively; I don't remember positively of him being there when the blow-out was going on."

The witness then says [near the bottom of R. 645]:

“I am sure that McCann was the one who had the idea of using the plug, because he was out there and ordered it made.”

At the top of R. 646 the witness further testifies:

“Fifty sacks of cement was used with that plug on the Christian well, to my remembrance. Not exactly fifty sacks, but we had a habit of using fifty sacks along about that time.”

A little below the middle of R. 646 the witness says:

“Christian Well No. 1 was the first time I ever knew of a plug being used in a well. I can say now that it was a better method than the siphon method we had been using, but then I didn’t know. I don’t reckon that it was an experiment then with the plug, it worked mighty nice. That was the first time it had been tried, as far as I know. It worked better than the siphon method, but at that time I didn’t know which one was the best; I didn’t know personally myself, because they were both perfect successes.”

The extreme pertinence and strength of Mahaffey’s testimony can be gathered from his statement at the bottom of R. 661, where he says:

“Well, how I happened to be positive it was used is I made the plug myself and my remembrance is I put the plug in the hole myself. That was a new thing for me at that time; that was my first one.”

At R. 727 Hearne Harper, one of the contractors who did the work of cementing Christian Well No. 1, testifies:

“In 1909 I remember we cemented Christian Well No. 1 with plug, but as to that exact date I would

have to get it from this book. It was along in the springtime, and if you will let me look through there I can give you the exact date.”

(Harper is referring to a private memorandum book that he had in his possession.) There were objections as to his method of refreshing his recollection but afterwards the log of the well itself was produced as we have heretofore pointed out. At the bottom of R. 741 Mr. Harper refers to and explains how Christian Well No. 1 was cemented and near the bottom of R. 742 he states that this job of cementing was a successful one saying the Christian Well “was a big gas well and did not show any leak behind the casing after we cemented it”.

R. 743, he says:

“When we cemented Christian Well No. 1 just after the cement was pumped down, there was mud in the casing and the plug was in the bottom extending into the casing, the casing 3 or 4 feet from the bottom.”

Asked how the cement was prevented from going back into the casing [bottom R. 743], he says:

“We just left our swivel on top of the casing and couldn’t anything come back. That swivel closed off the top of the well.” (The last step of the claim in suit.)

At the bottom of R. 744, Mr. Harper states:

“On Christian No. 1, I can give the names of some of those present. Walter George was on that job, and John Burrows, and a man called Red Pyle, and Harmon Mahaffey, and that is about all I can remember now. A fellow by the name of Fred Kyle worked on it. I didn’t keep all of the names of the

men working for me, I had more than one rig. I would have to go back and hunt up some old time books to get them all, to keep them separate, because I can't remember all of the roughnecks and teamsters and men that worked for me in 1909 or 1908; I do well to look after the business end of it."

At the bottom of R. 746 Mr. Harper testifies that since cementing this Christian Well No. 1 as to whether the method was used extensively,—

"Yes, most all of the wells we have cemented have been cemented with plugs, or sacks used to show us or indicate that the cement was in the bottom of the casing and on the outside of it."

At R. 824 appears the testimony of Fred L. Kyle who, as we have before seen, was employed in the oil business beginning the latter part of 1908 and subsequently, and who testifies [R. 825] to quite an extensive experience in oil well cementing, saying—that in the latter part of 1908, in the spring and summer of 1909 he was employed by McCann and Harper as a roughneck, "helper I guess you would call it". Near the top of R. 825, he says:

"The first well that we cemented with the plug pumped through the casing was a well we knew as Christian No. 1. The other wells that we cemented were cemented through the drill stem, but that is the first well I remember pumping the plug down through the pipe. We used the method right along after cementing Christian No. 1."

Near the bottom of R. 825 he testifies positively that this was done in the spring of 1909, and at the top of R. 826 he continues to describe specifically the method which was used in cementing Christian No. 1, saying:

“After the pump stopped or stalled in those days, in 1909, we used to leave the pressure on. I mean we closed all the valves and left the pressure on the well, because we thought the mud might throw it back up * * *. That was a successful method from the time it was used in 1909.”

At R. 845 appears an abstract of the testimony of L. A. Pyle, who states that he has been employed in the oil fields as tool pusher since December, 1907, and who testifies about the middle of R. 846 that in the early part of 1909 he was a helper on a drilling rig working for Walter George, as driller, and McCann and Harper as contractors. At the bottom of R. 846 he says he knows how the wells were cemented and describes the previous use of sacks as we have heretofore set forth. At the bottom of R. 851, referring to his first knowledge of the use of wooden plugs for cementing, he states that it was about in April, 1909, when he was working on what was known as Christian Well. He says he was working there at night, (the cementing took place during the day time) and he describes what he saw—the cement piled up ready for cementing. At the bottom of R. 853, the witness says:

“I saw the cement stacked up on the floor, I think about 50 sacks of cement and about ten or fifteen sacks of sand. We used sand in those days. And I saw a wooden plug about five feet long, and I suppose about five or six inches in diameter, at the tool house, and a big bunch of shavings there where they had trimmed it with a drawing knife; but as to saying what they did with the plug exactly, I couldn't say. I was not there when they cemented the well.”

At R. 854 the following important testimony of the witness is given:

“The number of that well was Christian No. 1. Walter George was the driller and Fred Kyle was a helper, and Harmon Mahaffey was a helper, and I don’t remember the other men, there was another one there I know, but I don’t remember his name. *I have a very good reason for knowing the date this well was drilled and the time I worked on it, because I had my twenty-first birthday while I was on that well. I remember that very distinctly, because when I became of age I got some estate money from my home, and that happened while I was working on that well. I don’t think there could possibly be any mistake at all about the date. I think, according to the best of my recollection, that well was completed somewhere about the middle of April, in 1909.*”

Near the bottom of R. 854 the witness corroborates the others that the job was highly successful. The character of the witness can be gathered by his remarks in the bottom of R. 857, where he says:

“I didn’t see them put any cement in that Christian Well. I was there at night. *You told me you didn’t want anything except what I actually saw with my own eyes.*”

We submit that the positive testimony of these witnesses, corroborated by the log of the well, and the surrounding circumstances such as the previous use of sacks filled with shale or folded, established by the testimony of many other disinterested witnesses heretofore or hereafter to be adverted to, clearly establishes a prior use of the subject matter of the claim in suit and requires a finding of invalidity of the Perkins patent. Note again that

there is no conflict in this testimony as repeatedly intimated by the court, the witnesses are highly credible and unimpeached. We submit that there is no reason why the court should not accept their sworn statements as true.

Prior Use of Wooden Plug at the Dixie Well.

W. A. Abney, at the time of giving his testimony was a deputy sheriff, testifies at R. 805, as to his work in the oil fields beginning in the fall of 1908; he fixed the date [R. 805] by reference to a contract for some work which he knows he finished in February, 1908, and to a later contract of 1908 whereby the Busch-Everett Company leased a tract of land from the Dixie Oil Company to drill a well, stating that they contracted that well to McCann & Harper and that the well was finished up in February of 1909. The witness testifies [R. 806] that he did a good deal of their hauling at that time and that he had a contract with McCann & Harper to haul the rig crews back and forth, and that after the termination of that employment he went to work for the Standard Oil Company June 13, 1909. The witness testifies positively to these dates. At the middle of R. 806, he describes how this Dixie Well was cemented, saying:

“That is the first one I had ever seen cemented with the use of a plug.”

Upon objection by counsel to his remark that he had heard of others being used, he answered:

“But this one I know they did that because I was there and saw it.”

And at the bottom of R. 806, having previously described the method fully, he says:

“Well, it was done just that way, that was the first one I ever saw with my own eyes. I had seen other wells that were cemented, but I didn’t see it when it was put in them.”

Near the bottom of R. 807, the witness says:

“The Dixie well is the first one that I was right there when it was cemented. I saw a great many cemented after that at different places, but I can’t recall just what wells, because I was all over the oil fields from Oil City clear on up to Vivian and around Hosston, clear all around in that country. I remember this Dixie well so good because it was the first one I had seen cemented.”

This evidence comes from a disinterested witness, apparently credible and is clear and positive. Furthermore, it is corroborated by that of Wesley Jordan. At R. 862, Mr. Jordan refers to the well, saying that it was sometimes called the Douglas well and also the Dixie well. The witness says he knows Abney and that he used to live at Dixie. He also states that he thinks Mr. Abney was present at the time of the cementing of the Dixie well. At the bottom of R. 862, Mr. Jordan describes the cementing of the Dixie well, and at the middle of R. 863, he describes exactly how the plug was used, continuing on the same page his explanation of the operation, and saying at the bottom of R. 863 that the plug was used as a signal to indicate that the cement was outside of the pipe when the plug got down to the bottom.

The Prior Use of Wooden Plug at Jolly Well No. 2.

This is another specific instance of cementing with a plug, which is described fully in the testimony. The log of the well is found at R. 759, showing that drilling was commenced September 11, 1909, and completed September 29, 1909. The cementing of this well followed that of Christian Well No. 1, in which a plug was used. In the case of Jolly Well No. 2, under consideration, it was a machine turned plug. Walter George, the driller for McCann & Harper, refers to the finishing of this well [R. 595], in September, saying that he remembers he was on the job when the report came out that Dr. Cook discovered the North Pole, and that is the way he remembers it. He further says, another way he remembers it outside of Dr. Cook's discovery, is that he looked over the records of the well since; the log of the well. At R. 616, Mr. George describes the cementing of this well, stating [two-thirds down R. 616], that they had a machine turned plug. He says the same principle was used with both Jolly No. 2 and Christian:

“We used the plug on top of the cement and pumped it down the same way. I don't remember any other difference. I don't remember exactly how long the plug was on the Jolly No. 2; something like four or five feet. It was brought out there, and we decided it was too long and cut part of it off. It was four or five feet, maybe five or six feet, far enough to hit bottom and prevent it from going out of the casing. We then picked the casing up to where the plug sank past it and pumped it from the bottom, and the bottom of the plug struck the bottom of the well. That was on Jolly No. 2. * * * On this well the completion of the cement job was not the

completion of the well; it was drilled in afterwards.”

At R. 617, middle of the page, he says:

“We didn’t use the plug on the Jolly 1, but we used it on the Jolly 2, and after the Jolly 2 was cemented with the plug, I think pretty much all of the other wells were cemented with wooden plugs.”

(Remember, this was in September, 1909, a month prior to the alleged invention of Perkins and Double.)

Near the bottom of R. 618, the witness again describes the use of this plug method on Jolly No. 2.

At R. 756, the foregoing testimony is corroborated by that of Hearne Harper. The witness testifies:

“After Christian No. 1 well, and before October 1, 1909, Jolley No. 2 was cemented with plugs. Mr. Walter George and Mr. J. B. McCann was there and cemented it. Mr. McCann and I talked it over and stated that is the way we would cement that well, use plugs on it, and we went out there and cemented it that way. That was Jolley No. 2 well.”

The Prior Use of Wooden Plug at Powell No. 1 Well.

At R. 627, A. F. Powell is called as a witness and testifies that he is in the real estate business and is not interested in the oil business except in some property where he had a lease at one time. Witness is entirely disinterested. He states that he leased the property on which this well was located [middle of R. 628], and that the well was drilled sometime in the month of March, 1909; that this was the approximate date, according to his recollection, and that the only record of any kind that might

refresh his recollection as to the exact date was his lease on that property. At the bottom of R. 628, a certified copy of the lease referred to is produced; this lease is dated in August, 1908. The witness says that this does not enable him to fix the date more definitely than he heretofore had fixed it, namely, in March, 1909, as the time of the drilling operations.

At R. 631, the witness states that Mr. Crawford was the man who was handling the machinery in the drilling of Powell No. 1.

(We afterwards called Mr. Crawford who corroborates Mr. Powell as to the drilling of this well and describes how it was cemented.)

At R. 665, Mr. Crawford (who the court will remember at the time of his testimony was a drilling contractor and producer of oil, having been engaged in the business for about twenty-one years) testifies that he remembers the drilling of Powell No. 1 and that inasmuch as there was snow on the ground it must have been early in the season; that he remembers [R. 665] that he came to Vivian to drill this well, after having worked during 1908 around Oil City. He says he cannot give the exact date, whether it was in January or February, but it must have been in one or the other, in 1909. Near the bottom of R. 665 he describes how Powell No. 1 was cemented by the use of a plug, stating that they had them turned in the shop.

(It is significant that the use of plugs had progressed to a stage where they were turned on a lathe, instead of being made by hand.)

Mr. Crawford describes fully the use of the plug on Powell No. 1, as an indicator [R. 666].

Near the bottom of R. 673, Mr. Crawford refers to Mr. W. T. Ray, who at the time of the drilling of Powell No. 1, he said, was employed as a roughneck on the well. He again reiterates that the well was cemented by the use of a plug and states that Mr. Ray should be able to corroborate his statement regarding that well. He says that he knows that they began drilling in the winter time of 1908 and 1909 and the well was only 1,050 feet; that is the approximate depth of the well. He says that it was either in February or in March, or not later than April, 1909, that that well was cemented.

At the bottom of R. 674, he says:

“Powell No. 1 was a well of the Vivian Oil Company.”

At the bottom of R. 675, he gives us a further method by which he fixes the date. He says that about the first of June they had a cyclone that blew away the little town of Gilliam, about twenty-one miles up the river, and it hit about a mile from Oil City, and that he happened to be down at the supply store and was standing in front of it watching this same cyclone and was trying to make up his mind whether to run into a fire box on the boiler which was standing near, or to go into the supply store. He says at R. 676:

“I know it was in the spring of the year.”

He refers to a song the darkies sing about the Gilliam storm. He says he drilled both Powell No. 1 and Blackmon No. 1, (in which the same plug system was used) prior to the time of that storm, and that they were all cemented. This pretty definitely fixes the time of the cementing as prior to June, 1909.

At R. 691, Walter G. Ray testifies. The court will remember that Mr. Ray is a drilling contractor and producer, having started to work in the field in 1908, and commencing contracting about 1912, and has been doing that kind of work since that time. Mr. Ray corroborates Mr. Crawford and Mr. Powell as to the cementing of Powell No. 1, fixing the date at which the drilling was commenced on the well under consideration [top of R. 693] as February 9, 1909. He states, in corroboration of Mr. Crawford, that he roughnecked for Mr. Wolfe on that well. He states his recollection was that they worked about thirty days on the well as they had only to drill them between a thousand and eleven hundred feet and it didn't usually take long to do that. At the middle of R. 693, he states, that he remembers how the Powell No. 1 was cemented, and also stated that he has been familiar with that process since the Powell No. 1 job and that that *was his first cement job*. He says [bottom of R. 693]:

“I helped cement Powell No. 1 well.”

At R. 694 he states that the job of cementing the lower casing (there were two jobs referred to by the witness), was sometime in March, 1909, and at the bottom of R. 694, witness describes specifically how the wooden plug was made and how it was used. He says:

“Then we made a plug, I suppose it was 12 or 15 inches long, I don't remember the exact length, and put this plug in, and I asked Mr. Crawford, ‘What is the idea, how are you ever going to be able to drill that out?’ And he said that was Mr. McCann's way of cementing, and he had been doing that and had done it very successfully.”

At R. 695, the witness states in answer to a question as to whether he knew what the plug was used for and how it operated [bottom R. 695]:

“No, sir, I did not. Mr. Crawford explained that, though, when I asked him. That is the first time I had ever seen it done. On that particular job, that was the first I saw of the plug being used, then I asked Mr. Crawford how he would drill that out, and he said Mr. McCann had been using it, and it was a success * * *.”

[R. 696, top of page]:

“Said we could drill it out, so we went ahead and set the well in that way, and that is about all I know about it.”

The witness has fixed the date by reference to Engineers Time Book which is offered in evidence [bottom of R. 696] as defendant's Exhibit 2, Ray Time Book.

At R. 697, top of page, the witness says he knows how the plug operated on Powell No. 2. He testifies:

“Forced the cement down through the casing to outside; when the plug hit the bottom it demonstrated all of the cement was on the outside, and we set the casing back on bottom. It demonstrated that the cement was in the proper position because it stopped the pump, stopped the circulation.

It should be noted that the time of cementing this well is most certainly and definitely fixed by reference to the witness' records which are offered in evidence.

At R. 698 and 699, the witness mentions the names of the different witnesses that he discussed this method of cementing with at the time of the cementing of Powell

No. 1, stating that his interest was aroused because that was the first time he had the opportunity of observing that method of cementing. He says [R. 699]:

“Mr. Crawford told me if I would stay with him and take an interest he would make a driller out of me, so I was watching every chance in order to learn everything I could, and learn to be a driller * * *.”

He further says:

“Besides Mr. Crawford I talked to Mr. Walter George, Mr. Hearne Harper and Mr. Rowe about that method of cementing, and we all discussed it quite a lot.”

In answer to a question as to whether Mr. Harper knew of the process at the time of cementing Powell No. 1, the witness answered:

“Yes, sir, he knew all about it, I remember he said he used it before we had.”

At the bottom of R. 700, the witness testifies that he has no interest whatever in the outcome of this suit.

At R. 810, Mr. W. C. Wolfe corroborates the testimony of the other witness just above referred to under this heading, as to the cementing of this well by the use of indicator plug.

The Prior Use at Blackmon No. 1 Well.

At R. 673, the witness, Crawford, testifies that Blackmon No. 1 was the first real oil well drilled in the Vivian district. He says:

“That was cemented by the same process we used in the other one”

(referring to Powell No. 1). He says, it was owned by B. G. Dawes, and refers to Mr. W. T. Ray as one who could give information on it, having been a roughneck at the well at that time. At R. 674, the vividness of the witness' recollection is shown by his following statement:

“As to Blackmon No. 1, my recollection is it was in the springtime when it was cemented, and the way I fix this date is that when we drilled the well in we had an oil well, and Mr. Dawes asked me to get up at three o'clock in the morning and go out there, and if there was any oil showing around the derrick and on the pit to wash it all away, because there was some more land to be had there which he wanted before it was brought in, and he didn't want the oil showing up at daylight; and I went out there, and it wasn't cold, it was very pleasant. I walked the two and a half or three miles; got up at three o'clock as he asked me to do, and walked up to the well in my shirt sleeves.”

On cross examination [R. 676], the witness testifies he is not interested in the outcome of the case any more than he would like to see justice done to everybody.

At R. 698, Walter G. Ray testifies concerning this Blackmon No. 1 well. In answer to a question [bottom of R. 697] as to what experience he had with the use of a plug in cementing, after Powell No. 1, the witness testifies [top of R. 698]:

“Well, we moved off onto another well on a negro's farm by the name of Blackmon, Blackmon No. 1, and drilled that and cemented it the same way. I cannot tell the date of cementing Blackmon No. 1 well by reference to Defendant's Exhibit 2, my time book, but

it was in the spring and was still cool, I know. As well as I can remember, it was the latter part of April, 1909. That well was cemented the same as Powell No. 1 with the exception I remember there we were looking for something to go on top of the plug in order to stop the pump quicker when it hit bottom. It was kind of bad weather, and I had on an old rain coat—we called them slickers, and we cut the tail off of that rain coat, and folded it up and nailed it on top of this plug on Blackmon No. 1 to be sure the pump would stop when it hit bottom, and then we put some sacks of shale on top of that. Now, outside of that, that well was cemented the same as Powell No. 1. Mr. Crawford was still the driller there. As to who was present at the time of cementing Powell No. 1, Mr. Crawford was the driller, he was present, and that is about all I know of for sure, with the exception of one man that is dead, Mr. Grosh; he is dead.”

Notice that the witness' recollection as to details is very definite and complete.

At the bottom of R. 698 the witness testifies that Mr. Crawford was present and Mr. Bill Rowe was also there. The witness also testifies [top of R. 699] that after the cementing (which the court will note was long prior to the alleged invention of the patent in suit) they continued to use the plug and pumping through the casing right along, and have ever since. At the bottom of R. 699, the witness testifies that Mr. Harper knew of the use of this process prior to this time (April, 1909), he says:

“I remember he told me he had used it before we had.”

At R. 700, near bottom of the page, he says:

“The method was known among those who discussed it at that time as ‘the McCann type of cementing’.”

At the bottom of R. 700, the witness makes it clear that he has no interest whatsoever in the outcome of his suit.

A Brief Consideration of the Weight of The Evidence Above Referred To.

We have seen, in our discussion of the law preceding the synopsis of our testimony attacking the validity of the patent in suit, that a single prior use of the subject matter renders a patent void—we have also seen that such use may be proven by a single witness with strong corroborating circumstances. In the foregoing, we not only have the strongest of corroborating circumstances, the clearest possible fixing of dates by reference to records, but we have the most convincing evidence by a large number of disinterested witnesses testifying, not only to one, but to a number of uses which come precisely within the claim of the patent sued on. These witnesses corroborate each other. Many of them testify specifically concerning the same prior use.

We submit that if we have not conclusively proven not one, but a number of instances of prior use occurring during a period of nearly a year before the pretended invention of the patentees in suit, that it would be impossible ever to prove a prior use.

Defendants Have Not Infringed the Claim in Suit.

If it were necessary for the court in a patent suit to burden itself with the duties of the Patent Office—with the great labor of sifting specification and drawings and the prior art for the purpose of discovering and exactly defining the invention covered and patented—if it were required that the court equip itself with the instruments of the surveyor and personally establish the boundaries of every parcel of land involved in an action of trespass—the trial of such causes would indeed be confusing, complicated and difficult; and in the case of patent causes the work of the corps of specially trained Patent Office examiners employed for the very purpose of supervising the exact wording of the claims and thus defining as closely as words can define the scope of patented inventions would be of no avail.

One of the principal reasons why patent causes do not usually appear complicated to the patent attorney is not because of any special mechanical knowledge (the field covered by patented inventions is too broad for any such knowledge to be of much use); but because he knows the issues are necessarily narrow and because he can define them precisely even before he has seen the patent in question.

Whenever a patent attorney is asked for advice relative to the question of infringement of a patent, this is what he does: After a glance at the specification and drawings so as to know to what the patent relates, he turns to the claim to determine whether its language *describes* the proposed defendant's process or device. Generally speaking, if it does not read on or describe

the proposed defendant's device he knows that under the law there is no infringement. This was the method used by the court in *Tostevin-Cottie Manufacturing Co. v. M. Etinger Co., Inc.*, 254 Fed. 434, where the Circuit Court of Appeals for the Second Circuit held: "If a claim cannot be read on defendant's device there can be no infringement," and in *Geoghegan v. Ernst*, 256 Fed. 670, where it was held: "If a patent claim reads on an offending apparatus infringement is suggested, although not proved, but there is no infringement if the claim will not read upon that which is said to infringe."

We have said that the foregoing is true "generally speaking" because sometimes a defendant may substitute for an omitted element, a mechanical equivalent, namely, a step or part which performs the same function in substantially the same way, and constitutes substantially the same means as the omitted element (*Walker on Patents* (5th Ed.) section 354). (In the case at bar, however, it is not even remotely suggested that the doctrine of equivalents has any possible application, so that we need not confuse our discussion with it.)

We know also that Halliburton's two sets of patent attorneys whom he says in his letter [Defendants' Exhibit A, R. 506], "After careful examination of the Perkins patent" informed him that he had nothing to fear from the Perkins patent (although he was using both two plugs as illustrated and described in the Perkins specification and drawings, and also one plug just as was done by defendants in the Wagle case) [bottom R. 502]—we know these attorneys must have used this method in passing upon question of infringement; for they came to exactly

The attorneys prosecuting application for patent in suit certainly would have secured claims on the features necessary to be added to a barrier and the method of use of such features to make the barrier an indicator if *Perkins and Double had sworn that they invented them*. Opposing counsel knows this elementary law of dedication as well as anybody.

These are the considerations which undoubtedly led our Supreme Court in *Burns v. Myer, supra*, to admonish trial courts to be “careful not to enlarge by construction the claim * * * beyond a fair interpretation of its terms.”

Now, the present discussion prefaces a showing to be shortly made that *nearly half the language* of the only claim in suit does not in letter or in spirit describe or read on defendant’s process, and that the part of the claim which under any interpretation of which it is susceptible *does* describe defendants’ process *was adjudicated by the Patent Office with the acquiescence of applicant to describe an old process which was the property of other inventors or the public*. We ask the court therefore, to be patient for a moment as we feel that it is important to make clear how a loose ignoring of the wording of the claim operates to the confusion of justice and, particularly, but briefly, how it has so operated in this very proceeding on interlocutory motions.

The specification and drawings of a patent may be likened to landmarks by which the patented invention, *i. e.*, the invention covered by the claim is located. Suppose a plaintiff were suing for trespass on a parcel of land ten feet square. Such land might be described by reference to rocks, trees, etc., or other more definitely

located land. Counsel for plaintiff might by discussing entirely the land-marks, and the surrounding territory (being as silent on the ten-foot limitation as counsel in the case at bar has been on the claim in suit) give to the jury an impression that the land in question was hundreds of feet in extent and that defendant trespassed because he was on or near a land-mark a quarter of a mile away.

The foregoing is exactly what plaintiff *has* accomplished, as we shall see, in prior proceedings.

If Your Honors has quickly grasped the full significance of the preceding argument, and understand the meaning and function of the claim as a legal definition of the monopoly, every word of which must be observed—which may be *construed* but never *disregarded*, it may seem that we are overdrawing emphasis upon the fallacy of ignoring the claim, and the court may await somewhat impatiently for our comparison in which we expect to show that 26 out of the 54 words of the claim do not in letter or in spirit describe defendant's process, and that defendant has omitted the very essence of the supposed invention as defined, with the acquiescence of applicant, by the Patent Office.

However, the fact that the claim was ignored on the grant of the preliminary injunction in this case, as appears from the unmistakable statement to that effect by Judge James, will, we are sure, be recognized by the Court as a justification for such extraordinary emphasis. Here are the circumstances of such statement that the claim was ignored in granting the preliminary injunction: So uncertain was the meaning

of the preliminary injunction as construed on the contempt proceedings, and in various remarks of the court during interlocutory motions, that we actually did not know whether the injunction meant that we could not use a process without any plugs or barriers whatever, *i. e.*, what has been referred to in this proceeding as the no-plug process (admitted in the very application proceedings to be old before the alleged invention of the patent in suit); for the court had intimated *that possibly the pressure fluid for forcing the cement in place was an equivalent of the plug*. In this dilemma we must know exactly what the injunction meant or else cease operations entirely and sell our equipment; so, under the authority of *Kalamazoo Loose Leaf Binder Co. v. Proudfit, Loose Leaf Company, et al.*, 243 Fed. 895, and *Kaufman v. Williams, et al.*, D 37 Equity in this court, we applied for an order construing the injunction, asking Judge James clearly and specifically if we could use, among others, such no-plug process. Such motion to construe was made over five years ago, but has never been decided, and the partnership of Owen and Bales was forced to sell its equipment and go out of business because defendants feared that any practical process they might use might be construed as a violation of the preliminary injunction.

It was during the proceedings on this motion to construe that Judge James made it clear that in granting the preliminary injunction, and in refusing to dissolve it, he ignored the claim as a technicality, saying:

“You may be able to escape it by reason of the claims that have been made, by variation, but the fact remains that he [defendant Owen; Bales had not then

been added as a party] has taken the heart of this invention and is using it * * *. He wants to use the pressure; he wants to use the plug; and he wants to use pressure applied on top of the plug to put the cement in place. That is the heart of this thing as I take it.”

Could there be clearer evidence that the court on the preliminary injunction proceedings and on the contempt findings treated the claim as a “nose of wax”, absolutely ignoring the language? The claim that the court re-wrote for the purpose of preliminary injunction was simply pressure on top of a plug to put the cement in place. We submit that such method of reaching a decision has violated the most important and most often applied canons of construction of letters patent.

The following is a copy of claim 2 in italics and black-letter type. The language in italics correctly describes defendant’s modified Inskip process; the language in black-letter does not describe defendant’s process.

*“2. The method of cementing oil wells which consists of forcing cement down through regular well casing by means of **water pressure, the water being separated from the cement by a suitable barrier forcing the cement up outside the casing, and holding the cement in position under the water pressure until the cement hardens.**”*

Or perhaps we can make it ever more clear in the following manner: The only part of the language of the claim which describes defendant’s process is as follows:

“2. The method of cementing oil wells which consists of forcing cement down through the regular well

casing by means of * * * pressure, * * *
forcing the cement up outside the casing, * * *.”

To explain: Defendants did not use water or its equivalent (under the law an equivalent is a step or element performing the same function in substantially the same way and constituting substantially the same means (Walker on Patents (5th Ed.) page 441, last part of section 354).) They did not separate their cement from any pressure means by any barrier or separator whatsoever; they did not rely on water or any pressure (within the clear and only possible meaning of the patent, as we shall later see) to hold the cement in position until it hardened.

In short, 26 out of the 54 words of the claim do not in letter or in spirit or at all read on or describe defendants' modified Inskeep process. (Remember the language of the court in *Tostevin Cottie Mfg. Co. v. Etinger Co.*, 254 Fed. 434, quoted *supra*: “if a claim cannot be read on defendants' device there can be no infringement.”)

Concerning the process which Owen individually used before securing the Inskeep license, namely, that used by defendants in the Wigle case: defendants did not use water and did not separate the pressure fluid from the cement by any barrier. (Let it be borne in mind that it is our contention (as shown by the application proceedings on which the patent in suit was based), that the only thing new, as adjudicated by the Patent Office with the acquiescence of applicant (and the Patent Office did not know of the Shreveport prior uses) was the separation of the water from the cement, *and that the limitation as to barriers was inserted at the insistence of the Patent*

Office before the claim was allowed. In failing to use the Inskeep packer as a barrier, therefore, Owen left out the very *essence of invention* as defined by the Patent Office.)

Concerning, first, defendants' omission of any barrier to separate pressure fluid from cement: It is clearly in evidence that defendants have always put cement on top of the plug, that is to say, the plug has had cement above it and below it so as to be embedded in cement. This will not be controverted. In fact, counsel for plaintiff practically admitted by including it in his question to defendant Owen called on behalf of plaintiff to establish facts upon which the charge of infringement was predicated. [R. 548.] At R. 550, Owen testified:

"I was only using one plug, and I was not using it on top of the cement." He says [R. 551]: "I just used it as an indicator, not to separate anything. To stop the pump and to indicate when cement was all outside of the pipe. It did that because it [the plug] could not get out of the pipe. The pipe was reduced at the bottom and being the same diameter as the pipe above the reduced portion it could not get by the reduced portion" [R. 552] "the guide or some ring or something else, at the bottom of the casing stops this plug automatically at the bottom of the casing."

At R. 1290, Mr. Owen, called as a witness on his own behalf, explains that *from 20 to 50 feet of cement is always put on top of the plug.*

At R. 940, Mr. S. L. Pugh of the drilling contracting firm of Pugh and Miller testifies that in the use of defendants' method they always put 20 to 40 feet of cement on top of the plug. No witness is called to deny these

facts; they are uncontroverted. *The plug is not used as a barrier to separate anything. It is used only for the purpose and employs the method and apparatus which we have seen was dedicated to the public by patentees' failure to claim.* THE PLUG IS USED SOLELY AS AN INDICATOR AND NOT TO SEPARATE ANYTHING.

Now, why was the plug embedded in cement and not used as a barrier? Was this simply a clever idea for getting around the patent? In the first place, let us ask this question: Is it sharp practice to keep outside of the line of another's land and thus avoid trespassing? Is it wrong to use a public park up to the boundary line? We urge that there is slight materiality in why defendants did not trespass—why they put cement on top of the plug; but, nevertheless, we desire to show that the idea of putting cement on top of the plug (which is not shown in the Perkins patent in suit and consequently not any invention of the patent in suit) was *a thing of great value*. Here are the reasons why cement was placed on top of the plug: Cement is needed in the bottom of the pipe. Either you must use a long spacer 18 or 20 feet long ahead of the plug (as illustrated, but not claimed in the patent in suit) or as in the case of defendants' process where it is the bottom of the casing that stops the downward travel of the plug, you must put the cement on top of the plug. The reason why cement must be in the bottom of the casing is so that the bottom of the casing will be cemented off to permit a test of casing for leaks. If all the cement were pumped out of the casing, as it would undoubtedly be if there were not cement on top of the

Inskeep packer, such casing test could not be made. (See the admission on cross-examination of plaintiff's witness, Miley, as to the advisability and reasons for having cement in the bottom of the casing to be afterwards drilled out [R. 435]. Furthermore, sometimes the plug does not fit the casing as tight as it should. This might permit pressure fluid to go by, and when the plug reaches the bottom of a long string of casing there might be a considerable amount of pressure fluid the plug and below the casing which would also render impossible the casing test and might also jeopardize the job of cementing by causing a pumping of the cement too high outside of the casing. Still another reason is that sometimes the guide or obstruction at the bottom of the casing breaks and the plug goes through, (in such case performing no function whatever). Cement above the plug is then a safety factor to insure against pumping too high outside of the casing. [R. 940.]

Patentees in suit did not think of these things, yet now their assignee wants the patent in suit construed so as to embrace and cover such later genius of others.

At R. 264, is a copy of the specification and drawings of patent No. 1,057,789 granted April 1, 1913, to W. B. Wigle for Method of Cementing. This patent was adjudicated in this court in the case of Scott *et al.* v. Huber *et al.*, No. D-10-Equity, the decision being rendered in December, 1918. Present writer of this brief represented plaintiffs in that case. The last step of the Wigle process consists of pumping *all* of the liquid cement down out of the casing and up outside the casing. As will appear from the opinion of Judge Bledsoe deciding that

case, the defense was based upon this fact which we have been at pains to establish in this case, namely, that it is always desirable to have cement in the bottom of the casing to be afterwards drilled out. Defendants in the case last mentioned escaped infringement solely by reason of the fact that a *single word* of the Wigle claim did not read on and describe their process, namely, the word “all,” that is to say, they escaped infringement because they left some cement in the bottom of the casing, although it was stipulated *that every other word in the claim exactly described defendant's process.*

There was, therefore, nothing “evasive” about defendant's use of cement on top of the plug. The idea of using cement on top of an indicator was a valuable contribution to the art—but not a contribution made in the patent in suit, and not one that should be permitted to be exclusively monopolized by patentees in suit by any misunderstanding by the court of the true scope of their claim.

We Have Heretofore Repeatedly Stated That the Only Possible Novelty of the Claim, as Agreed Upon by Perkins and Double and the Patent Office in the Prosecution of the Application for the Patent in Suit (and They Knew Nothing of Prior Uses at Shreveport at That Time) Consisted in Separating the Water From the Cement by Barriers. The Process of Cementing Without Any Barrier Whatever, Which the Record Shows Has Long Been in Highly Successful Use, and Is Used in Competition With the Barrier Method Even at the Present Day) Was Distinctly Adjudicated by the Patent Office to Be Old.

When Defendants Use a Method in Which an Indicator Is Embedded in Cement, Obviously, They Are Using Such Admittedly Old No-Barrier Method.

These Facts Cannot Be Converted, for They Appear in the Very Application Proceedings Upon Which the Patent in Suit Was Based.

In the application proceedings for patent in suit [Defendants' Exhibit "A," R. 224], applicants say:

"Applicants' process of forcing down the cement by the hydraulic water column not only enables the cement to be forced down to any desired depth, but also after it is placed in position and even while being placed in position the cement cannot possibly be diluted by water."

At Defendants' Exhibit A, [R. 230], (application proceedings), in rejecting proposed claim 2, the examiner finds:

"Applicant has neither shown nor described a method of cementing wells in which no barriers are used between the water and the cement."

At Defendants' Exhibit A, [R. 232], applicants are found urging that they be not limited to barriers as follows:

“Regarding the rejection of claim 2, it may be stated that the barriers are not included in the claim, as it is believed that applicants should not necessarily be restricted to the use of barriers. No reason is known for thus limiting the claim.”

At Defendants' Exhibit A [R. 236], the examiner responds to the foregoing argument as follows:

“Claim 2 is again rejected for the reason that it is unwarranted by the disclosure of this application as filed.

“Applicants' argument has been carefully considered. The objection of the examiner does not go to the broad statement of the claim, nor attempt to require introduction of unnecessary limitations, but is that applicants have not disclosed the process set forth in this claim. There is no suggestion anywhere in the specification that the cement may be introduced in place without the use of barriers, nor any disclosure of a process by which the cement may be introduced without them. The claim is therefore rejected.”

The examiner then proceeded to argue, as he had theretofore, that the claim was also not allowable over references of record showing that the subject-matter without the inclusion of barriers was old. This argument must have convinced applicants, for at Defendants' Exhibit A, [R. 239], the rejected claim is cancelled and allowance of claims *limited to barriers, as the Patent Office had decided was necessary to differentiate*

over the prior art, was requested. Applicants might have appealed from this view of the examiner, but they did not. Can they now be heard to contend that the claim should be construed as broadly as though the limitations were not inserted? After agreeing tacitly with the Patent Office that the limitation was necessary to differentiate from the prior art, can they now be heard to argue that such limitation should be rejected as surplusage?

In Hopkins on Patents, page 188, we find set forth as Hornbook law, the following:

“Rule VII. The patent must be construed in the light of the limitations imposed by the Patent Office as a condition of the grant.” (Citing *Shaw Stocking Co. v. Pearson*, 48 Fed. Rep. 234-236.)

Under this rule, Hopkins, quoting from the case of *National Hollow Brakebeam Company v. Interchangeable Brakebeam Co.*, 106 Fed. Rep. 693-714, and supporting such quotation by the citation of many cases, says:

“If a patentee acquiesces in the rejection of his claim on references cited in the Patent Office, and accepts a patent on an amended claim, he is thereby estopped from maintaining that the amended claim covers the combinations shown in the references, and from claiming that it has the breadth of the claim that was rejected. (Citing many cases.) When the practice of the Patent Office was to make references to and deny patents on rejected applications, a patentee who amended his claim upon reference to a device contained in such a rejected application was held estopped to claim the device in question to be an infringement of his amended

claim, even though the citation was erroneously made by the Patent Office.” (Citing *Lapham Dodge Co. v. Severin*, 40 Fed. Rep. 762-764.)

Quoting from *Sargeant v. Hall Safe Lock Co.*, 114 U. S. 63, 29 L. Ed. 67, and citing *Hubbell v. United States*, 179 U. S. 77-82, 45 L. Ed. 95, *Hopkins on Patents* on page 189 also says:

“In patents for combinations of mechanism, limitations and provisos, imposed by the inventor, especially such as were introduced into an application after it had been persistently rejected, must be strictly construed against the inventor and in favor of the public, and looked upon in the nature of disclaimers. A claim so modified cannot be construed to be as broad as before its enforced modification (citing *Phoenix Castor Co. v. Spiegel*, 133 U. S. 360, 33 L. Ed. 663; *Williams v. Goodyear Metallic Rubber Shoe Co.*, 49 Fed. Rep. 245); and this rule obtains though the applicant made the amendment under protest, undertaking to seek such broadened construction after issue. (Citing *Thomas v. Rocker Spring Co.*, 77 Fed. Rep. 420, 23 C. C. A. 211.)”

If applicants had not desired to acquiesce in this view of the Office they could have appealed, first to the Board of Examiners in Chief, next to the Commissioner of Patents in person, and from the Commissioner to the Court of Appeals of the District of Columbia. (Rules 133, *et seq.* Rules of Practice of the United States Patent Office and statutes there referred to. Also *Walker on Patents* (5th Ed.) Sec. 133.) If they still desired to litigate the question they might have filed a bill in equity in the United States District Court to com-

pel such issuance, notwithstanding adverse decisions on such appeals. (Walker on Patents, 5th Ed. Sec. 134.)

In the comparatively recent case of Selectasine Patents Co. v. Prest-O-Graph Co., 282 Fed. 223, our Court of Appeals, Judges Gilbert, Ross and Hunt, opinion by Judge Hunt, on page 224 said:

“It was the Patent Office that determined that the process of using a plurality of screens, or a screen for each separate color, is old in the art, and the patent was granted on the theory that the process was old. Likewise, upon that very theory, the limitations which were put upon the claims of the patent, by the Patent Office were acquiesced in by the patentees. Therefore, the patent must be construed with relation to the rejected claims and to the state of the prior art as considered by the Patent Office. *Hubbel v. United States*, 179 U. S. 80, 21 Sup. Ct. 24, 45 L. Ed. 95. We were always in accord to the extent that the patentee cannot escape from the position which he took before the Patent Office, and the consequence of not having appealed from the action of the Patent Office.”

In the case at bar the Patent Office decided that any of the combinations of the claims proposed *which did not include barriers was old*. Plaintiff acquiesced in this view and included barriers. We submit that any process which does not use barriers between the cement and water is not the Perkins process and therefore cannot infringe said process.

The Claim Calls for Water as Pressure Fluid. Defendants Have Never Used Water: They Have Always Used Mud. Mud Is Not the Equivalent of Water.

Defendants use a thick heavy mud as pressure fluid, and not water [R. 940]. Patentee Perkins at R. 395, admits a thick heavy mud is now almost universally used. He also admits that under the old method of drilling with standard tools (time of grant of Perkins patent) *water* was mostly used. He says [R. 395], that water is only used under present day practice *to thin the mud*.

The patent claims the use as a pressure fluid of *water* and not mud.

In the rotary method of drilling now almost universally used, mud is absolutely necessary. [R. 395.] Water could not be used as it would wash away the mud lining of the hole and probably cause caving. Furthermore, the use of water as pressure fluid is prohibited because it is too light and would probably require such excessive pump pressure in the case of deep wells as to burst the pipe. [R. 940.] Hematite is used to increase the weight of the column of mud to counterbalance the weight of the cement outside of the casing and thus permit a safer pump pressure to be used in deep wells. [Plaintiff's witness Miley, R. 439-440.]

In short, mud is successful and water would not now be attempted to be used because it is not adapted for the purpose, and would not fit in with the necessities requiring the use of rotary mud, the hole being under present practice always full of mud as admitted by patentee Perkins [R. 395]. Water would therefore, be a failure

impracticable for use under present practice. *We contend there is no equivalency between success and failure.*

If this point had been raised and there had been evidence to sustain it in the suit against Wagle and Cottongim, we believe the outcome in that case might have been different. Concerning this, Judge Trippet said:

“In my opinion they could no more call that stuff, that is pumped in above concrete or last barrier water than you could call the lava that ran down Vesuvius and covered Pompeii water.”

We did not have the evidence before Judge Trippet that we have in the case at bar to the effect that *water is a failure and mud is a success.*

Defendants in Their Modified Inskeep Process Have Omitted the Entire Last Step of the Claims in Suit.

Finally, on this question of infringement, we urge that in the use of defendants' modified Inskeep process *the entire last step of the claim* in suit is omitted, namely, the step described as “and holding the cement in position under water pressure until the cement hardens.”

Hopkins on Patents as section 289, gives the following rule:

“RULE XXI. THE OMISSION OF ANY STEP OF A PROCESS AVERTS A CHARGE OF INFRINGEMENT.”

In support of this text Hopkins quotes Mr. Justice Strong in the case of Goodyear Dental Vulcanizing Company v. Davis, 102 U. S. 222, 26 Law Ed. 149, as follows:

“It may be conceded the patentee is protected against equivalents for any part of his invention.

He would be, whether he had claimed them or not. But when a product arrived at by certain defined stages or processes is patented, only those things can be considered equivalents for the elements of the manufacture which perform the same function in substantially the same way. The same result may be reached by different processes, each of them patentable, and one process is not infringed by the use of any number of its stages less than all of them.”

In the process of the patent in suit, the last step of the claim 2, “and holding the cement in position under water pressure until the cement hardens,” is performed by a tight head at the top of the well which, obviously, must be kept on top of the well and kept closed, otherwise the weight of the cement on the outside would cause it to flow back into the casing and force the pressure fluid out at the top of the casing. In defendants’ modified Inskip process the head has always been taken off or defendants have at least opened the cocks so as to relieve the pressure, relying upon the spring-actuated dogs of the Inskip packer to prevent the packer from rising in the casing and the cement from flowing back from the outside to the inside of the casing. At reporter’s transcript, page 532, line 17, defendant Owen testifies that they cemented between 200 and 250 wells with such modified Inskip process and [R. 957] either the head was removed or pressure released by opening stop cocks in all but possibly three or four of them. These three or four were all cases where the plug did not perform its intended function because the guide or stop at the bottom of the casing broke [R. 958] or because inadvertently too small a plug was used, in either of which cases,

obviously, the plug performed no function whatever—certainly none of the functions either described in the specification or claimed in the patent in suit, the process where the plug thus failed being virtually a non-indicator process.

Being able to dispense with the tight head is a great advantage. In the case of the process of the patent in suit after the cement is in place outside the casing the well must be allowed to stand with the head on for several days while the cement hardens; in the case of defendants' modified Inskip process the fact that the head can be immediately taken off saves valuable time.

It has not even been suggested, much less contended, that the dogs of the Inskip packer are the equivalent of this last step, as obviously, while they perform *in part* the same function as the mud column above the packer with the tight head, they do so in *substantially a different way and constitute substantially different means*, and therefore do not come within the definition of an equivalent. (Walker on Patents (5th Ed.), section 354.)

Plaintiff's counsel have endeavored to answer our argument that defendants did not use the last step of the claim in suit by reading only *the letter of this language of the claim and not its spirit*. Thus they say: The column of mud above the packer has weight, and therefore pressure and they assume (although, obviously, there can be no convincing proof of the fact) that if the column of mud above the packer were removed the dogs themselves would not be sufficient to hold the cement outside of the casing. (Of course, it is foolish to talk about removing the mud from the casing, the well, as

Mr. Perkins admitted, being always full of mud during the drilling and cementing operations.)

Obviously, neither would the column of fluid without the tight head hold the cement outside of the casing.

Now, such literal reading of the language of a claim is not authorized by law. The case of *Westinghouse v. Boyden Power Brake Co.*, 170 U. S. 537, 568, 42 Law Ed. 1136, is the leading case on this matter of literalness. The court there said:

“The patentee may bring the defendant within the letter of the claims, but if the latter had so far changed the principle of the device that the claims of the patent literally construed have ceased to represent his actual invention, he is as little subject to be adjudged an infringer as one who has violated the letter of a statute has to be convicted when he has done nothing in conflict with its spirit and intent.”

Notice how the court stresses the “actual invention.” The actual invention was certainly not the weight of the column of water inside of the casing, for patentees have shown a tight head which obviously must be used. (It is in evidence, uncontradicted, that in those three or four instances out of 250 where the Inskeep packer performed no function, that defendants *had to keep the head on to keep the cement outside of the casing.*) Patentees show no conception of any other means than the tight head to hold pressure, and this was what was plainly meant by the last element of this claim. Walker on patents (5th Ed.) in section 182 collects many authorities to the effect that the language of claims must be construed in the light of the description and drawings.

At page 341 Hopkins on Patents, quoting Brown, J., in *Goodyear Shoe Machinery Co. v. Spaulding*, 101 Fed. Rep. 990, 994, says:

“Infringement should not be determined by a mere decision that the terms of the claims of a valid patent are applicable to defendant’s device. Two things are not precisely similar because the same words are applicable to each.”

Hopkins also at page 340 under rule IV which reads, “TO INFRINGE, SUBSTANTIALLY SIMILAR MEANS MUST BE EMPLOYED,” sets forth the language of Judge Lurton, in *Bundy Mfg. Co. v. Detroit Time-Register Co.*, 94 Fed. Rep. 524, 540, as follows: “The alleged infringer must have done something more than reach it by substantially the same or similar means, or the rule that the function of a machine cannot be patented is of no practical value.”

Hopkins also gives us on page 348 the following rule: “RULE XIV. A DEVICE MAY BE WITHIN THE LITERAL TERMS OF A CLAIM YET NOT INFRINGE.”

Quoting in support of this rule the language of Mr. Justice Brown in *Westinghouse v. Boyden Power Brake Co.*, 170 U. S. 537, 568, 42 L. Ed. 1136, 1147, as follows:

“Even if it be conceded that the Boyden device corresponds with the letter of the Westinghouse claims, that does not settle conclusively the question of infringement.”

If the language of a claim is to be read according to its letter and not its spirit, such reading may result in its covering something that the inventor never had in mind and did not contribute to the art. As we have

often before argued, under such circumstances a claim on a toothed comb might read on a picket fence.

It is elementary law also that a claim may be limited, but can never be enlarged, by reference to the description or drawings. See cases cited on this law at Hopkins on Patents, page 197.

In the case of McClain v. Ortmeyer, 141 U. S. 419, 35 L. Ed. 800, Mr. Justice Brown has said:

“The claim is the measure of his right to relief, and while the specification may be referred to to limit the claim, it can never be made available to expand it.”

Applying this rule, the court should look to the specifications and drawings to determine what the patentee meant by the last step of the claim “holding the cement in position under the water pressure until the cement hardens,” and then should construe this language as applying to the step actually given to the world, and not some method that the patentee clearly did not have in mind and did not contribute to the art.

If there were no other difference between defendants’ process and that of the claim in suit than the omission of this last step, without the substitution of what clearly comes within the definition of an equivalent there would be no infringement. The court will no doubt remember the often quoted language of Judge Baker in *Adam v. Folger*, 120 Fed. Rep. 260, 263, 55 C. C. A. 540:

“If a patentee claims eight elements to produce a certain result, when seven will do it, anybody may use the seven without infringing the claim, and the patentee has practically lost his invention by declaring the materiality of an element which was in fact immaterial.”

Overlooking the Antiquity of the Entire Subject-Matter of Specification and Claims as Established by the Shreveport Depositions, and Treating the Record as Though No Such Evidence Was Before the Court, the Essence of the Alleged Invention as Agreed Upon by Applicants and the Patent Office Namely, Separation of Water From the Cement, Is Practically of No Value.

As we have seen, applicants tried to cover and secure claims on a process of cementing without plugs or barriers. For instance, one of such claims [Defendants' Exhibit A, claim 3, afterwards 2 as amended, R. 577] reads:

“The method of cementing of oil wells which consists of forcing cement down the well casing between two water columns.”

This was disallowed by the Patent Office on the grounds that it was not the invention of the applicants and was old. This is the no-plug process which it will be remembered defendants have been at great pains in this case to show has been long in successful use, and is used even at the present day in competition with the method in which barriers are used and is as successful as the barrier method. Many witnesses have testified to this fact, referring to such method as the “no-plug” method. Mr. C. G. Shand, president of the California Oil Well Cementing Co., was one of these witnesses. At [R. 898], Mr. Shand testifies that his company does not use plugs in cementing. At [R. 899], he says that while he could not say exactly just how many wells his company had cemented by such no-plug method, it was in the neighborhood of not to exceed [R. 899] 900, all of

which are cemented from January 14, 1924, to the date of trial. At R. 901, Mr. Shand makes it clear that all these wells were cemented in the state of California by the no-plug process, that is, by the method which Perkins and Double have attempted to cover in their patent application, but upon which claims were rejected by the Patent Office on the ground that it was not the invention of the patentees in suit and was old. Mr. Shand's testimony proved also that it is *successful* even in competition with the plug method at the present day.

Roscoe W. Stevens, who at the time of his deposition was field superintendent for the St. Helens Petroleum Company, while he was superintendent of the Lompoc properties of the Union Oil Company [R. 921] says that beginning in the early part of 1911 [R. 922] he cemented oil wells for the Union Oil Company, not using tubing, but pumping through the casing, that is to say, using the same no-plug method of rejected claims of Perkins and Double, and which is used at the present day by the California Oil Well Cementing Company.

At [R. 925], Mr. Stevens says that probably 200 cement jobs came under his personal observation and that *in none of these jobs* was any barrier or plug used between the cement and pressure fluid. The pressure fluid was pumped directly on top of the cement without any attempt to separate them. At R. 925, he says that the percentage of success with such no-plug method was about equal to other methods of cementing.

Ignoring entirely for the moment the Shreveport depositions, the foregoing is given as a complete answer to the erroneous impression expressed in the opinion of

Judge James, on motion for preliminary injunction to the effect that prior to the application of the patent in suit:

“No sure or generally effective method had been devised, for shutting out of water from oil wells * * *. It was therefore a matter of outstanding importance, a thing which marked the difference between success and failure in the oil industry that a method be devised by which water could be prevented from mixing with the oil.”

By the very application proceedings for the patent in suit it was admitted that the no-plug method was old, and by the evidence we have just called to the court's attention it is clear that such method was and is highly successful; that it has long been used, and is in use at the present day. Of course, no matter how great had been the contribution of Perkins and Double, they would not be entitled to more than the words of their claim clearly express; but if the preliminary injunction was granted on the theory that the claim could be disregarded because Perkins and Double had given the world the first successful method of cementing oil wells such idea is entirely erroneous. The no-plug system was known before Perkins and Double, and it was used then, and is even used at the present day, by many in preference to the method in which plugs are used.

Is it not obvious that if the old no-plug method is successfully used on such a large scale at the present day, *the separation of pressure fluid from cement is not necessary and that the supposed real contribution to the art by patentees in suit is of little or not real utility?* Is it not also clear that the real value of the plug is only as an indicator?

The success of the no-plug process conclusively establishes that the separation of the pressure fluid and the cement to prevent supposed dilution is of no practical value, and *yet such separation is all that patentees in suit (overlooking the Shreveport depositions entirely) added to the art by their very confession to the Patent Office at the time of their application.*

Defendants'-Appellants' Appeal From the Action of the Court in Entering the Decree in Contempt [R. 139] and the Judgment Thereon Against It [R. 146] in the Sum of \$3,155.05 Expenses, and \$436.20 Costs. It Is Believed There Is Clear Error Involved in These Decrees.

In the answer of defendants' to the bill of complaint in this cause they have described fully and correctly the process of cementing which they had used [R. 21] paragraph XIII *et seq.*, inserting in such answer a copy of the Inskeep patent under which they had secured a license for a consideration of \$5000.00 and a royalty and under which they were operating. Furthermore, in answer to interrogatories propounded by plaintiffs they also fully describe such process of cementing under this Inskeep patent, making it clear that they used the Inskeep packer with its ratchet pawls permitting it to go down through the casing but preventing its rising in the casing, thus omitting the last step of the process, which calls for pressure to be held on the well by a tight head during the setting of the cement. They also pointed out clearly in these answers, as well as in affidavits thereafter filed in opposition to the motion for preliminary injunction, the other differences between their process and the subject matter called for by the claim

in suit which we have fully heretofore explained in this brief in our discussion of the question of infringement.

On the motion for preliminary injunction defendants' contention that they had omitted the last step of the process by removing the tight head or opening its stop-cocks was contested by plaintiffs' witnesses and there was, consequently, a conflict in the evidence on this point. The court decided this contention in favor of plaintiff, holding that defendants *had*, notwithstanding their insistence to the contrary, maintained pressure on the well by the tight-head after the cement was in place outside the casing.

The whole theory of plaintiffs' case on motion for preliminary injunction, was apparently based upon the use by defendants of the tight head to maintain pressure, this theory impliedly conceding that if defendants' did not use the tight-head they omitted the last step of the process of the claim in suit and therefore did not infringe.

In his opinion awarding the preliminary injunction Judge James said [R. 48]:

“It was also asserted at the hearing that defendant did not hold the pressure established against the tight-head by the pump during the time allowed for the cement to set. Direct issue was taken with him on this point by several persons who presented affidavits wherein it was stated that affiants had observed defendant at work in several instances, at times just prior to the hearing, and that he had in all cases held the pressure against the head by shutting off the stop-cocks connected with the latter. Considering all of the circumstances shown, and if it be conceded that under Claim 2 the holding of the pressure while the cement is setting is an indispensable step in the

process, as to which a definite decision need not now be announced, the conflict of that evidence may well be resolved in favor of the plaintiff.”

It is clear from the immediately foregoing quotation that the court granted the preliminary injunction on the theory that defendants, notwithstanding their insistence to the contrary, *did* use the tight head, and it is clear that the injunction was granted against the use of a process in which such tight-head was employed. The court's suggestion that possibly the last step in the process was not an indispensable one, is, of course, fully answered by the law that the omission of a single step in a process avoids a charge of infringement and that there is no such thing known to the law as an immaterial element in a claim (Hopkins on Patents, Sec. 289, Rule XXI, and cases cited).

The law previous to this decision on injunction thus had long and firmly established that the step referred to *was an indispensable step of the process* and that if defendants did not use such step in combination with the others there was no infringement. If the court had believed and intended to hold that whether the defendants used the tight head or not it was guilty of infringement—if it had been the intention of the court to restrain defendants from the use of the process which it is admitted in their sworn answer to have been used by them, namely the use of a process in which the element of pressure was dispensed with, how easy it would have been for the court to have made it clear that the defendants were restrained from the use of the Inskeep packer in the manner in which they had admitted in their answer

to have used it. The court could, in a single sentence, have made its injunction as clear as the noon-day sun by simply holding that the use of the Inskeep packer constituted an infringement whether pressure was used or not, and that defendants were restrained from such use.

As attorneys for defendants we were called upon to construe this injunction, and we believed then and we submit now that there is only one reasonable interpretation for it and that is that the language clearly implies that defendants were restrained from the use of the process in which, as a concluding step, pressure was maintained by a tight head. We did so advise defendants and are earnest in our belief that we were correct in so doing. After several months of patient watching by plaintiff's detectives it became apparent to plaintiff that what defendants' had said in their answer was true and that they did not maintain pressure, but omitted the last steps of the process. Notwithstanding this thorough proof that plaintiff's own witnesses did not speak the truth on motion for preliminary injunction and that defendants did truthfully describe the process they had been using, contempt proceedings were instituted, during which it clearly appeared that this last step was not used, and the decree in contempt now complained of was entered. We submit that such decree was unjust and erroneous, that the defendants were justified in believing that it meant that they were restrained from the use of a process in which a tight-head was used to maintain pressure and that they were not guilty of any violation of any injunction of the court as clearly and plainly construed by the court's opinion accompanying it which implied that if they did not use the tight-head they did not

infringe. We submit that the assignments of error on the decree in contempt should be sustained and this judgment and decree should be reversed.

The Amount of Judgment in the Final Decree (\$16,250.00) Even Assuming Validity and Infringement Is Very Excessive, This Amount Is Based Upon a Finding That \$50.00 Per Well Is a Reasonable Royalty. The Only Royalty Ever Paid for the Use of the Process of the Patent in Suit Was \$25.00 Per Well and the Following Admitted Facts, We Believe, Will Show Even the Last Mentioned Amount To Be Excessive.

Under a previous heading in this brief, we believe we have made it clear that the no-plug process of cementing, admitted in the very application proceedings upon which the patent in suit was based to be old, had long and successfully been used, to as great an extent as that of the plug process. The court will remember the testimony of Mr. C. G. Shand, president of the California Oil Well Cementing Company, who testified that previous to the trial and from 1924, his company had cemented 900 wells, all by the use of this no-plug process. [R. 899.]

We have also called the attention of the court to the testimony of Roscoe W. Stevens, who testified that while superintendent of the Union Oil Company [R. 921] and beginning with 1911 [R. 922], they had cemented all their wells in his district by pumping through casing and using the same no-plug method of the rejected claims of Perkins and Double—the same process which even up to the time of trial the California Oil Well Cementing Company (as well as many others) had been using successfully.

This no-plug method of cementing was set up as a standard of comparison and it was contended that inasmuch as cementing could have been accomplished as successfully without the use of any plug or indicator, as with it, that there should be no substantial recovery in the case at bar. Of course, it is elementary that the profit to be recovered is only the advantage, if it can be measured in money, of the use of a patented process over an old method which a defendant was free to use, and that such recovery should not be the entire profits resulting from the general operations of a defendant. (Hopkins on Patents, p. 595.) On behalf of plaintiff it was not attempted to prove damages. The only theory was on the basis of a reasonable royalty.

The return to the master's order, and the evidence that supported it, showed that during the alleged infringement period defendants had cemented 321 wells, about 50 of which, however, were cemented by the no-plug process, leaving about 271 in which the indicator was used. It also appears clearly in evidence that those using the no-plug process, including the defendants in the case at bar, got as much for cementing wells by the use of the no-plug process as they got when they used the plug or indicator. The reason why defendants used the plug was, first, because of their license under the Inskeep patent and the specially constructed packer which by reason of the ratcheting pawls, which held it in the bottom of the casing, enabled the tight head to be removed and thus save several days time; second, the indicating feature was of some value—although, even where the plug is used, as a further check on the placing of the cement, the displacing fluid is measured in. Such measuring in had long been the method used in the no-plug system of cementing. Under these circumstances,

it is our earnest contention that even assuming validity and infringement, only a nominal recovery should have been decreed.

We have been adverted to the fact that the licensee in the Mid-Continent field, Halliburton, has testified that he paid to Perkins \$25.00 per well royalty. This was an inflated valuation. The only warrant for the court of increasing the amount of recovery against defendants to double the amount of the royalty paid by Halliburton was the unsupported guess of one or two expert witnesses—expert as witnesses, but with no practical experience in the actual methods set up as our standard of comparison (Paul Paine, one of such alleged experts, did not even know that the no-plug method was a successful method). The doubling of the Halliburton royalty, as a measure or recovery, has nothing in reason to support it—it is purely arbitrary, and we urge, that even assuming validity and infringement the amount of recovery should be reduced so as not to be higher than that which the only licensee has ever paid. The payment of this \$25.00 royalty was arranged after the consent decree in the suit against Halliburton, and no doubt the parties carefully figured the amount, and Halliburton did not pay anything excessive.

There is not shown that there was any business lost by the Perkins Oil Well Cementing Company by reason of defendants' activities in the field, because it clearly appears that there were many who were opposed to the use of the Perkins method and who were convinced of the value of defendants' method because of the saving time incident to the ability to remove the tight head promptly after the cement was placed outside of the casing.

We urge therefore that even assuming validity and infringement the amount of recovery should be not more than \$25.00 a well for 271 wells.

Conclusion.

We submit that:

(1) The only valuable part of the process illustrated and described in the patent in suit is the spacer 14 and the method of manipulating the casing so as to make the plug operate as an indicator, and that such feature has been dedicated to the public by failure to claim and that defendants had a right to use it.

(2) That the essence of the alleged invention of the patent in suit was barriers to separate the water from the cement.

(3) That defendants did not use the essence of the invention and therefore did not infringe.

(4) That the claim in suit is limited to barriers to separate the water from the cement, and likewise to water as pressure fluid, and to the use of a tight-head to maintain pressure, and that defendants have not used any of such features and therefore do not infringe.

(5) That the subject-matter of the only claim in suit is conclusively shown to be anticipated and void, not once but many times by the evidence of Shreveport, Louisiana.

(6) That the decree finding defendants guilty of contempt and fining them \$3,591.25 and costs, is erroneous and should be reversed.

(7) That even assuming validity and infringement of the patent in suit, the recovery should not be to exceed \$6,775.00 and costs.

Respectfully submitted,

WESTALL AND WALLACE, ^{ELS} EL

Attorneys for Defendant-Appellant.